

The Nation's Business



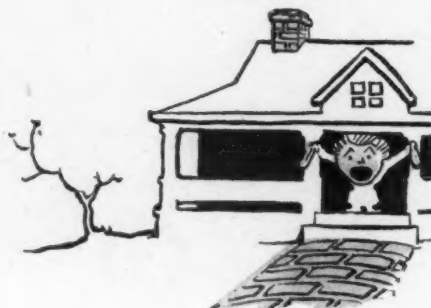
THE MAKING OF A MAGAZINE

TWENTY CENTS A COPY

TWO DOLLARS A YEAR

HI! JOHN!

**YOU FORGOT YOUR
PAJAMAS!**



Sorry, Mary Jane, but I can't get 'em now. I simply must catch that train to Washington.

I'm going to the Fifth Annual Meeting of the Chamber of Commerce of the United States, and don't want to miss a single session (first session, January 31, 11 a. m.).

You see, I've reached the conclusion that it's time for American business to wake up to the value of getting together, pulling together, and of putting American Commerce and Industry over the line for a touchdown. Team work's what'll do it!

Besides, I want to know first hand what other business men think we're in for at the end of the war; what measures of preparedness I'd better adopt. What of finance?—of foreign trade?



Then again, 150 of my associates, working as committees, have been months studying questions affecting the nation's business, which is my business, and are ready to report. After which there'll be something to say, and maybe I'll have a point to add to the discussion.

Incidentally, there's no little to be gained in just rubbing up against the other boys in the lobbies and around the outskirts of the meetings.

So, "other boys", that's why I've allowed myself to be pictured in this undignified attitude in the middle of the page—to impress upon you that you'd better join me at the



Fifth Annual Meeting of the

**CHAMBER OF COMMERCE
OF THE UNITED STATES**

**January 31, February 1 and 2
WASHINGTON, D. C.**

Am.
Review



Skylines of American Cities—Los Angeles

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The Reason Why

ON or about the 28th day of January, 1917, some fifteen hundred business men will take train to Washington to attend the Fifth Annual Meeting of the Chamber of Commerce of the United States.

THEY will pay their own expenses, except in the few cases where their home organizations undertake to do this. They will take a vacation from the control of their own business for a week, while for three days they will sit down and listen morning, afternoon and evening to discussions of business problems. Their combined expense for making the effort will total well over fifty thousand dollars, to say nothing of the loss they may incur through absence from business.

WHY do they do it and what do they get out of it? Why do they come in ever-increasing numbers, and why do the same men consider it a privilege to come year after year? And most particularly why when the National Chamber has a means of action and of securing opinion throughout the year by the use of the referendum?

HEAVEN forefend us from the day when business and social intercourse among business men shall be carried on by letter, telephone, telegram, long-distance, toll line and wireless, and when community discussion and recording of vote shall entirely replace the open forum, the battle of leaders, the clash of debate.

THEY come from all corners of the country—yes, and from far distant dependencies and foreign countries as well—to meet each other face to face, to measure friend and opponent, to unite their best judgment and good will in the work for the promotion of American commerce at home and abroad which underlies the general prosperity and well-being of the American nation.

The Nation's Business

VOLUME 5, NUMBER 1

A Magazine for

Business Men

WASHINGTON, JAN., 1917

The Making of a Magazine

A Distinctly American Institution Which Puts White Paper and Printers' Ink Into Our Billion-Dollar Class of Industries

By J. WAINWRIGHT EVANS

CONSIDER the printer and his ink. He toils far into the night, spinning wondrous tales of every industry save his own. Yet the application of printers' ink to white paper in 1914 (the latest year for which the government has figures) produced in 31,162 establishments a commodity that sold for \$810,508,111.

Sell the wheat crop of the nation at the prevailing high prices, and the wheat of the country will just about pay its yearly printing bill.

The printing press has long been sung as the bulwark of our liberties and more to be feared, to quote Napoleon, than 100,000 bayonets. But there has been none so poor to do reverence to its economic aspects. What an epic it would be, marshalling and interpreting the facts behind the 15,613,000,000 separate pieces of periodical literature, to say nothing of another billion or so of books and pamphlets, which the American printing press brings forth in one year!

Add to this picture of material production the human element of creation—for is it too much to say that the humblest contribution to the maw of the press is brought forth with great travail—and you will have an epic indeed.

But all this is for another time. To-day the muse is summoned to tell the pleasing tale of a single phase of the glory of the printing press, the American magazine.

The American magazine, some one has said, has influenced American life and letters more profoundly than any other single agency, not excepting the schools. It has shaped our social consciousness, it has molded our political thought, it has tempered our appreciation of art and literature; it has quickened commerce, changing overnight as it were a whole people's standard of living—who set your breakfast table this morning, who taught you to sweep without a broom, who arouses in you a longing for music in the home, for a motor car, for

ready-made clothes—who, but the magazine? Here is the story, then, of a typical American magazine.

WHEN Cyrus H. K. Curtis, after successfully founding the *Ladies Home Journal*, undertook to revive Benjamin Franklin's ancient publication, the *Saturday Evening Post*, the following comment appeared in *Printers' Ink*: "Cyrus Curtis, who has made a pot of money out of the *Ladies Home Journal*, is now engaged in blowing it in on the *Saturday Evening Post*."

In this connection there is another clause in the indictment of the reckless Mr. Curtis. He once said, in speaking of an employee, "He is the most expensive man connected with the company. He won't spend anything."

In view of what happened to Mr. Curtis later on, these anecdotes are significant. The people with a passion for playing the safe and sane couldn't see why he wouldn't let well enough alone. The sequel shows that they spoke better than they knew; for presumably they did not foresee in their croaking a gloomy prophecy of a wonderful and inspiring success.

As evidence of his success exhibits A are attached herewith.

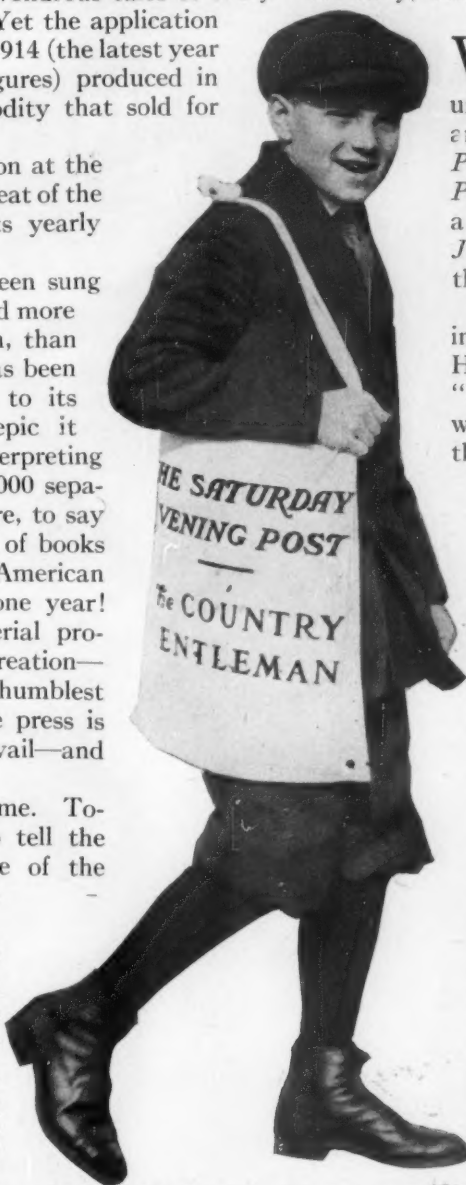
Every twenty-eight days, the 120 giant presses of the Curtis plant, working 24 hours a day, turn out more than 12,000,000 magazines, more than 142,000,000 a year.

Fourteen acres of floor space measure the capacity of the new Curtis Building in Philadelphia, exclusive of the storage warehouse.

A single edition of the *Ladies Home Journal* weighs 2,100,000 pounds; a single edition of the *Saturday Evening Post* fills 95 large mail cars.

The ink used yearly in printing the three Curtis publications, the *Saturday Evening Post*, the *Ladies Home Journal* and the *Country Gentleman* weighs 900,000 pounds. Forty thousand pounds of flour paste is used each year in pasting address labels and sealing copies.

About 3,500 persons are employed in the business,



One of the 50,000 *Post* boys. To work for the *Post* and receive its business training this boy had to show that he was physically sound, morally straight, and mentally awake.

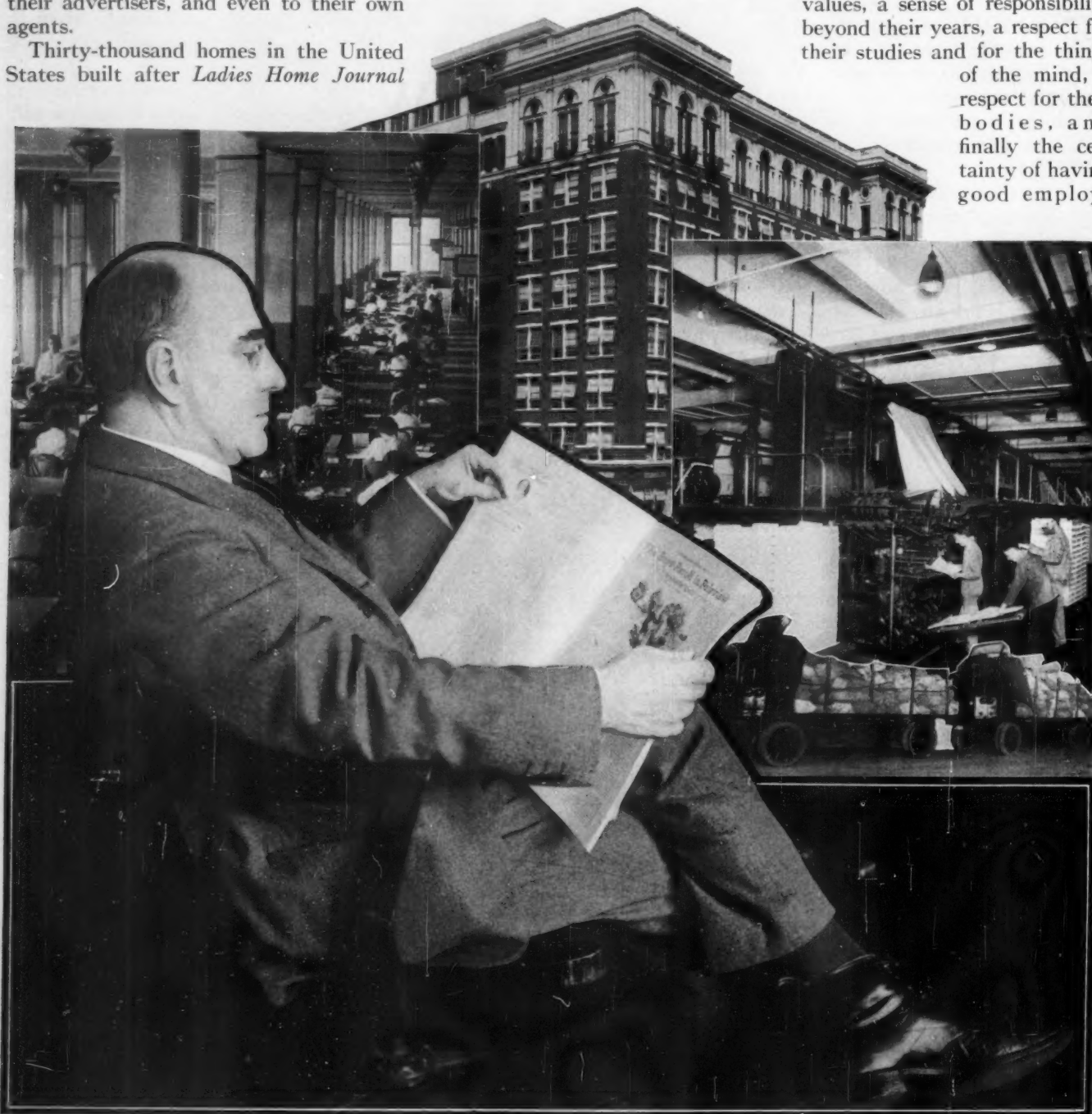
manufacturing and editorial departments of the Curtis plant. It would take Benjamin Franklin and his wife Deborah, with their ancient Franklin press, 19 years to turn out a single edition of the Post if they were to try it to-day.

The permanency and the solidity of that success is a combination of editorial skill and business acumen. But the rock bottom fact is that the editorial skill of the Curtis Company is skillful, and its business acumen is keen because both qualities are based on the practical, working condition, that the thing most desired by the world is service—and on the idea that first, last, and all the time the Curtis publications must render service, and so make themselves indispensable to their readers and to their advertisers, and even to their own agents.

Thirty-thousand homes in the United States built after *Ladies Home Journal*

plans and in consultation with *Ladies Home Journal* experts—thousands of babies helped to sturdy health, with the aid of the *Journal's* medical experts—farmers making two blades grow in place of one, and acquiring through the services of the *Country Gentleman*, essential information on anything agricultural that they may wish to know—buyers depending on the authority and reliability of advertisements in the Curtis publications—advertisers depending on the Curtis Division of Commercial Research for scientific, and sure, and unselfish guidance in the placing and advertising of their goods, and for the expenditure of tremendous sums—fifty thousand boy salesmen given a vocational and moral training of remarkable effectiveness, a grasp on business values, a sense of responsibility beyond their years, a respect for their studies and for the things

of the mind, a respect for their bodies, and finally the certainty of having good employ-



Few persons realize what is behind a page of the magazine they read. The Curtis Building at Philadelphia has fourteen acres of floors. Every twenty-eight days 120 giant presses turn out more than twelve million copies of Curtis publications. These presses use 900,000 pounds of ink annually and it takes 40,000 pounds of flour paste to put on address labels and seal separate copies.

ment found for them later if they have earned that service from the Curtis Company by means of service faithfully and effectively rendered by them—these are the high-lights of the Curtis plan.

In short, it has from the start been an application of plain, old-fashioned, common-sense business principles to the problems of big business.

THE successful editor is a super-man, in that he must possess a sixth sense. He must have a sane vision of his field, he must by intuition anticipate drifts in public thought and taste, and with unerring judgment gauge what is vital to his public at a given time. This brings us back to where we started. The true heart of his problem is "what sort of reading matter will satisfy?" Not what does the public want, for that is quite another thing. It may desire a debauch, but the satisfaction would scarcely be present the morning after. The truly successful editor realizes his periodical as a quasi-public utility, and he must have for the needs of the public that sympathetic touch and that instinctive understanding which only the spirit of service can give.

The editorial problem of a magazine goes hand in hand with the business problem. A man like Cyrus H. K. Curtis is more than a great editor and more than a great business man. He is both. He is a great publisher.

So clearly do the circulation and advertising methods of the Curtis publications explain much of their great power and influence that the story of their internal organization and of their present status is one of the most dramatic to be found in the annals of American business.

Mr. Curtis has done more than answer the question "What sort of reading matter will satisfy the people?" He has answered conclusively the question "What is the secret of great and lasting business success?" He has answered it, as I have already indicated, by service to his readers, to his advertisers, and to the very boys who deliver the Curtis publications.

Consistent and wise application of this principle has resulted, not merely in a big circulation and big advertising rates, but further in a valid and final demonstration of the fact that sound business and sound ethics are in the long run synonymous terms—a truth on which not all business men have the intelligence to build.

This has made possible, among other things, the development in the Curtis Company of a Division of Commercial Research. Nothing more revolutionary and constructive can be found in business history. It marks probably, the beginning of a business epoch, based upon a positive science of advertising and distributing goods.

The Division studies, one by one, the chief industries of the country. On the basis of the information so obtained—oftentimes confidential information—the experts



The evolution of *The Saturday Evening Post* from the first copy of Benjamin Franklin's *Pennsylvania Gazette*.

of the Division have formulated laws that seem to govern the buying and selling problems of all sections of the country. They have written what is really a business philosophy on the result of their research.

The method of investigation is to go out on the road and visit hundreds of cities in all parts of the country, calling on manufacturers, wholesalers, retail stores and consumers, and applying to the information obtained by these interviews keen common-sense methods of analysis which will bring out the underlying facts: For example, one year was spent on automobiles, trucks and motor cycles, and their accessories; another year on department stores, with particular attention to textiles and women's ready-to-wear clothing; six months on agricultural implements; and for the last eight months the investigators have been occupied with the vast subject of foods and the problems and methods of grocery stores.

In making these investigations representatives of this division have traveled more than 125,000 miles. The reports already made include more than 80,000 typewritten pages and 900 tables and drawn charts. At present the division is at work on the tractor, in the belief that it is

one of the coming big things in American agriculture.

Another development of the Curtis idea of service is to be found in the work of the *Ladies Home Journal*, whose twenty-two departments answer annually 600,000 letters written by persons in need of guidance and help of one kind or another. House-building, housekeeping, the care of children, and every conceivable kind of personal problem are among the things with which the *Journal* editors have to deal. Think of a publication making itself as essential as that—apart from the entertainment and the general information offered in its pages! Consider the educational influence on thousands, for example of those world paintings now being reproduced in the *Journal* at great expense, and—again—with enormous returns to the *Journal* for a service rendered to the public.

AND here is the service program of the *Country Gentleman*. It speaks for itself:

"We stand for a national solution of national agricultural problems, at present mostly political.

"We stand for a square deal for the land, for recognition of the fact that whatever improves the situation of the man on the land is of universal benefit.

"We stand for a high business efficiency of the individual farmer, which will increase his net profits from the soil.

"We stand for a broader and more satisfactory life, better social conditions, and better standards of home-making."

Space limitations will not permit a detailed account of the circulation system of the Curtis Company. It has

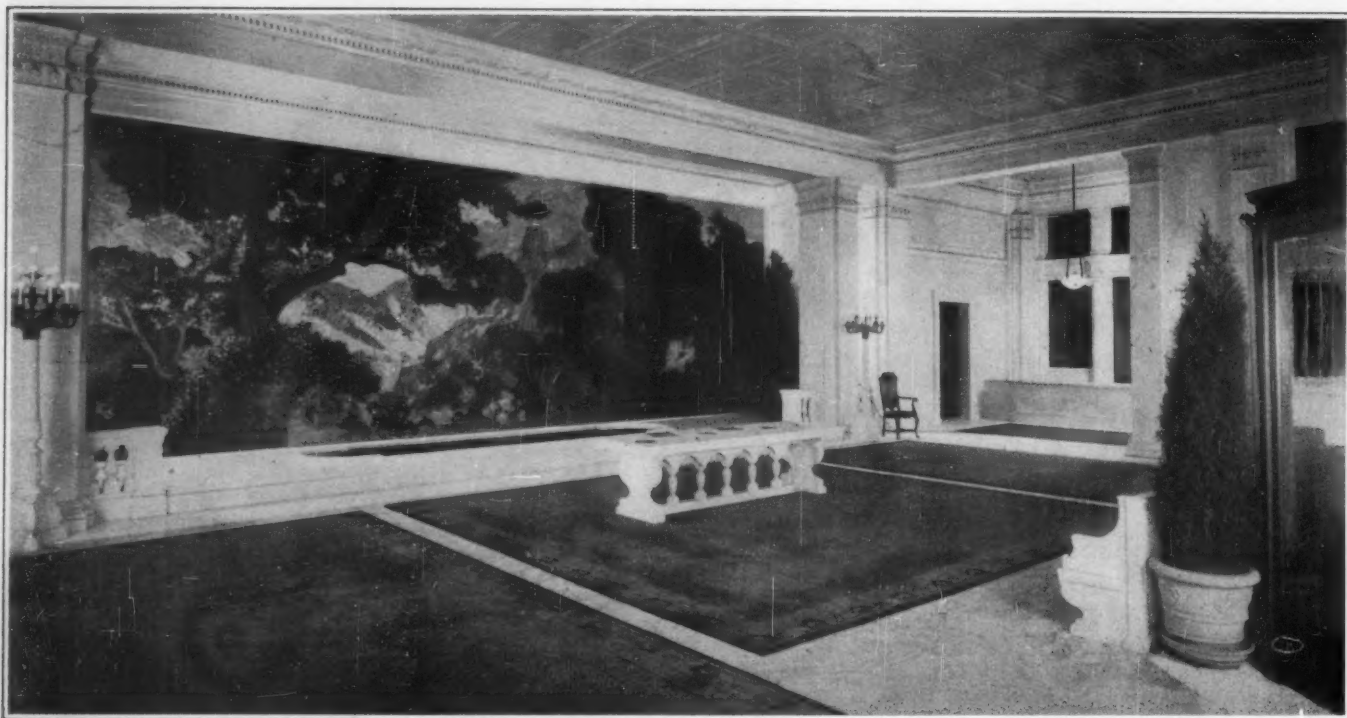
built up its vast army of readers partly, as already indicated, by becoming indispensable to them; and partly by highly intensive methods, worked out through a system of territorial sales managers, 40 correspondents, 50 road men, 2,000 district agents, and 50,000 boys under these district agents. This gives the Company 50,000 movable news stands, so to speak, which go out where magazines will sell, and waste no effort on localities where they won't sell. The home office has a string on every one of those boys, and that is good for the boys and good for the Company.

This string on the boys is the League of Curtis Salesmen. The Company makes two offers: To young men, "For any young man fulfilling certain conditions we guarantee to secure, upon request, a good salaried position with a reputable concern in or near his home town." To employers, "We offer to send you, when they are ready for employment young men trained in business fundamentals, particularly salesmanship, with good records for three years in school and with us, and who, we believe, will develop into good business men."

A boy joins the League of Curtis Salesmen. To become a Master Salesman in the society, he must have a certain record of sales of all three publications, determined by the locality which he is in; he must have a perfect record in ordering and remitting for at least a year; he must meet the essential (Concluded on page 39)



The head of the company who "blew in a pot of money" on *The Saturday Evening Post*. His real name (and in true magazine style we announce that it is "hitherto unpublished") is Cyrus Hermann Kotschmar Curtis and he is as big as his name.



This beautiful entrance greets the nervous author on his way to the stern arbiters of the Curtis editorial departments. The mural in the back is "The Dream Garden" by Maxfield Parrish and Louis C. Tiffany.

The Challenge of Peace

Will War Bequeath Letters of Marque
and Reprisal on American Business?

By EDWARD A. FILENE

Decorations by John Howard



EVERY man who carries directive responsibilities in business is obliged to analyze present tendencies in order wisely to determine future policies. In this sense prophecy is one of the practical instruments of business administration. Never in the business history of the United States has this general principle been so pertinent as now.

The ending of the war will mean the beginning of the return from the ab-

normal to the normal, a process that will produce new business situations, the meeting of which will demand a high quality of commercial statesmanship. American business men, conscious of their social as well as financial function, desire, in addition to a wise safe-guarding of American interests to contribute an element of constructive helpfulness to the processes of international reconstruction after the war.

At the first definite move toward peace our inflated prices will tend to fall. Any disastrously sudden fall in prices, it seems safe to assume, will be unlikely because the period of diplomatic negotiations on terms of settlement, which may take from six to eighteen months, will be marked by a feverish business activity. The now belligerent nations will stock up on materials of which war has caused a shortage, as a preparation against an unsatisfactory settlement in which case the war might be resumed.

This would mean, however, but a temporary steadying of prices. Eventually prices must go to normal and in going necessitate widespread readjustments. There may be wide fluctuations in speculative stocks, but the Federal Reserve Act, by making credit more readily available, has removed any serious danger of a general panic.

DURING the past two years we have witnessed an increase in our export trade that has shifted the United States from the debtor to the creditor column among nations. The abnormal element of this export trade must be left out of our reckoning for the future. The outlook is that our exports to a European market will be seriously restricted after the war.

The real importance of this restriction may not become

thoroughly evident until one or two years after the war, because Europe will be obliged to make heavy purchases of raw materials with which to get the process of reconstruction under way. This European demand for raw materials, however, will raise their price for American as well as European manufacturers, for the price will adjust itself to practically the same level for both.

Three considerations point toward a restriction of our European markets after the war:

FIRST, The debts of war, the expense of reconstruction and the continuing expense of rival military preparations for the future will reduce the purchasing power of Europe.

SECOND, The high tariffs which the nations of Europe are erecting for the double purpose of increased national income and greater military self-sufficiency will make them more difficult customers.

THIRD, The proposed trade war in which the Allies on the one hand and the Central Powers on the other are planning to turn their present military alliances into future business alliances may not only restrict trade between these two groups but also the trade of the United States.

Our neutral markets will also become increasingly difficult because the pressure to sell will be so much heavier upon European nations than upon us that they will be determined to capture the neutral markets even at a sacrifice of normal profits and wages if necessary.

The extension of our banking facilities in South America and the organization of such trade instruments as the International Corporation increase, of course, our ability to meet competition in neutral markets.

The administration of our tariff problem after the war will demand superlative statesmanship marked by rare insight, ready recognition of changing conditions, and a flexibility of mind that can adjust theory to fact. A rigid low tariff policy and an uncompromising prohibitory policy will prove equally futile. A too low tariff would invite a flood of cheaply made foreign goods that would throw our more highly paid labor into competition with the lower waged labor of Europe. But a prohibitory, or near-prohibitory, tariff would make it increasingly difficult to export our surplus; and if we do not export our surplus it will over-crowd our home market and exert

a depressing influence upon prices, profits, and wages. The ultimate desire is, of course, that each nation shall export the goods it can produce more cheaply and efficiently than any other nation, and not be penalized by tariffs in so doing. Such a system, if it were universal, would reduce the cost of living for all nations, since all nations would benefit by the particular efficiency and production-advantage of each nation.

PARADOXICAL as it may sound I am about convinced that the quickest way to universally low tariff may be through the universally high tariffs that may follow this war; for as soon as all nations have high tariffs, the benefit of high tariffs for any one nation will disappear, the system of abnormally high tariffs will break down under the weight of its own absurdity, and the nations will gradually bargain their way to a sane tariff system.

The problem of taxation after the war bristles with questions that have evoked a confusion of predictions. Some contend that taxation will fall so heavily upon capital throughout Europe that it will be transferred to neutral countries for reinvestment. Others contend that taxation will fall so heavily upon the masses in Europe that they will be driven either into other countries or into revolution in order to escape its weight. It is not wise to be dogmatic on any of these matters, but it seems measurably certain that the following simple principles will underly the whole problem of taxation in Europe after the war.

Taxation, broadly speaking, can fall upon but these three things: (1) Wealth, as found in great estates, large incomes, inherited privileges, and similar types of accumulation; (2) Productive Capital, as found in the industrial activities of the nation, and (3) The People—the masses with limited incomes.

It is safe to assume that the burden of taxation will not be put upon productive capital. The war has proved that free and effective production is the corner-stone of military power. An intelligent statesmanship will not permit taxation to cripple the nation's military strength at its economic source.

Nor will wisdom permit taxation to fall too heavily upon the masses. If a too burdensome taxation were allowed to reduce the incomes of average men to a point where they were unable to keep themselves

physically fit there would be a decline in both the military strength of the nation, and that productive efficiency upon which military power ultimately rests, and serious discontent would arise. Then, too, the outlook is that throughout Europe the masses will rise to greater power than ever after the war, and this new power will not meekly submit to an unduly burdensome share of the taxation.

Wisdom will unite with expediency in compelling wealth to carry a greater share of the tax burden than ever. This will be accomplished through a more vigorous use of the income tax, the inheritance tax, the land tax (especially upon uncultivated land) and heavy taxes upon luxuries. A certain degree of conscription of wealth is among the possibilities.

The taxation of Europe will be reflected in the costs of production, which in turn will be an important factor in the competition we will have to face after the war.

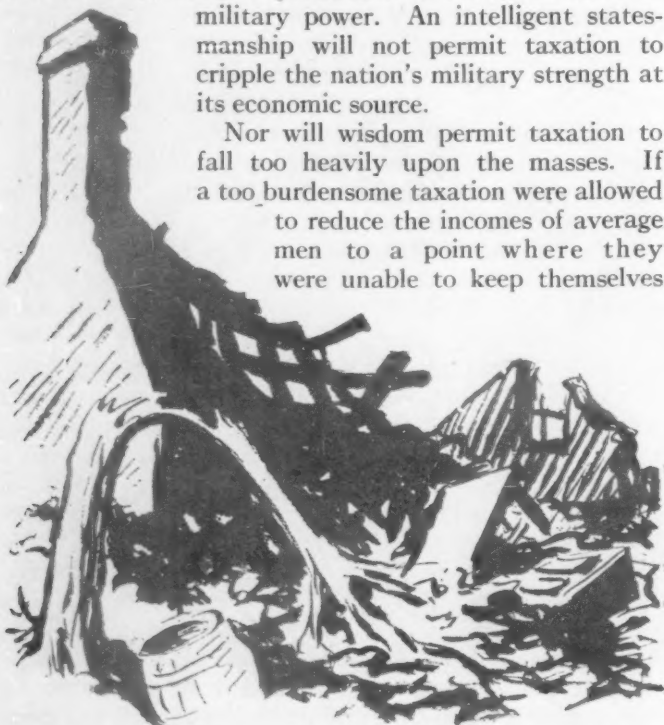
It becomes increasingly evident that immigration will be severely restricted after the war. The United States will take measures to prevent the undesirable element, while Europe will take measures to prevent the desirable elements from coming to our shores. Europe will need her best workmen for the tasks of reconstruction and will not dare to let a liberal emigration weaken her military strength. Europe will proceed to restrain emigration by military service requirements. But in the long run the governments of Europe, if they are to keep their workmen at home, must fortify military restriction with economic attraction, for behind European workmen will be the push of hard conditions at home and before them the pull of better conditions abroad.

This will mean another powerful factor in their pressure to sell to neutral markets in order to gain an enrichment of their own life that will prevent discontent banking up behind the wall of emigration restrictions.

When the heavy buying from abroad is reduced after the war there will naturally be a tendency to reduce wages that have been raised during the abnormal business activity of the war period. Any such attempts will be resisted by American labor, and the resistance of American labor will be more difficult to meet than ever, because the organized labor of America will come to the end of the war stronger than ever. Out of the pressure on capital to lower wages and the counter-interests of labor to keep wages up severe labor troubles are likely to result.

A restricted immigration will leave a gap in the labor supply of the United States. This result is already evident in the effort of certain Northern industries to attract negro labor from the South to take places formerly filled by unskilled immigrants.

In the wage struggles between labor and capital it is probable that women will be drawn increasingly into the ranks of labor and, with the aid of improved machinery, into the heavier labor which American women have not formerly done. The war has shown a labor versatility



and labor availability in women that was not suspected. It is probable that the tapping of this new source of supply—woman labor—will mean that more laborers will be available after the war than before.

Should women be drawn, to any marked extent, into the heavier industries of America there would result a large exodus from our domestic service, the present compensation and attractiveness of which could not compete with the wages in many industries that might open to women.

Our domestic servant problem is already a vexing one. If it should be further aggravated by large withdrawals from its ranks there might result an attempt to repeal the Chinese and Japanese exclusion acts. Such an attempt might be for the primary purpose of securing domestic servants, but once this immigration were unrestricted an attempt would probably be made to use it in our entire labor market as a weapon of advantage in the stress of labor difficulties.

OUT of this analysis it seems certain policies take shape—policies we must adopt if we are to reach the double result of protection of American interests and of helpful contribution in the process of reconstruction. The limits of this article do not permit of more than a mere naming of these desirable policies.

(1) We should have in readiness at the end of the war our new Tariff Commission, equipped with all the money and assistance—expert and secretarial—that prompt and effective work will demand. This will call for funds and equipment on a scale heretofore not deemed necessary.

(2) Our exporters and bankers should not be hampered by a lack of freedom to combine to meet the competition of foreign trade rivals. In common with every other exporting country we must give carefully thought out government cooperation to our trading forces.

(3) We should lend government support to the movement for industrial and vocational education, to the end that by more efficient production we can reduce the costs of production in our competition with other nations. This must be done, however, in a way that will fully protect American wages.

(4) We should reduce out national tendency to wastefulness. In the intense competition that will follow the war we will be dealing with a Europe subjecting itself to a regime of rigid economy for patriotic reasons. Waste will cease to be a personal matter and will become a social concern involving the business success of our nation. Since all personal waste goes into the costs of production, in critical times it may advisedly be called a species of economic treason.

(5) We must make a scientific and sympathetic approach to the labor problem. The present method of labor fighting with instruments of force to raise wages and capital fighting with instruments of advantage to keep wages down is unscientific and wasteful. Far-sighted American employers will begin to put as much hard thinking into the problem of men as they have put into the problem of machinery. If the employers of America do not solve the labor problem by business statesmanship, the employees of America will determine the outcome by force; and what labor cannot get in the future by the physical force of strikes, it may be able to get through the legal force of the income taxing power.

There are two methods of approach to the problem of protecting our interests against the destructive trade war into which a pressure to export promises to drive Europe: One is to meet the competition by domestic program the other is mitigate the competition by an international program that will tone down, if not re-

move, the underlying causes that threaten to drive Europe into a trade war.

The domestic program I have tried to sketch briefly, and recent developments in opinion and events make equally clear the lines along



which we should move in the matter of an international program.

American business will, in my judgment, show the highest practical wisdom in supporting to the fullest extent the international program advocated by the League to Enforce Peace which has behind it a rapidly growing body of American opinion and the essential principles of which have received the open support of the President of the United States and leading statesmen in all of the principal belligerent nations. This program advocates the formation of a league of nations, every member of which will agree to carry all international disputes in the future to an international court or council of conciliation for complete examination before resorting to war; and further that the nations entering the league shall agree to use their combined economic power and, in the event of its failure, their combined military power against any nation in the league that refuses to submit its disputes to a trial of opinion before resorting to arms.

THIS is the one program now before the public that offers a practical hope for a reduction of the burden of rival armaments. It is conceivable that the nations of Europe might carry the burden of their war debts and the expenses of reconstruction by fairly normal processes of world trade, but if to these fixed charges they must add the continuing expense of an unprecedented rivalry in armaments, then inevitably Europe will be forced to turn normal world trade into a cut-throat race for markets that will complicate the business life of the entire planet. Our effective advocacy of the League to Enforce Peace program will be looking, therefore, to the toning down of what will probably be the most important factor behind a destructive trade war.

It is needless to add, in an article to the responsible readers of THE NATION'S BUSINESS, that to all these business arguments for support of this international program is joined the high compulsion of the duty we owe to civilization as a responsible member of the society of nations. In a peculiar sense this war is putting the idealism and moral strength of the United States to the supreme test. Dare we pass through a crisis like this without making a contribution to the future security of civilization commensurate with our strength and greatness as a nation?

Warships—156 of Them— But Who to Build Them?

An Authorized
Interview with
Josephus Daniels
Secretary of the Navy

THE United States has gone forward by leaps and bounds in naval preparedness—on paper. For the first time in our history, we have embarked on a continuing program of new ship construction. In three years we are to do what it was originally planned to do in five years. We are to build 156 vessels. By March 1, 1917, contracts will have been awarded to private shipyards for the first 66 of these or work begun on them in navy yards. The other 90 must be commenced before July 1, 1919. The amount appropriated for the navy for the present fiscal year is by far the largest in our history. At one sweep, Congress authorized the construction of more tons of naval preparedness than it had authorized in all of the ten preceding naval acts.

This done, the country heaved a sigh of relief and relaxed its taut nerves. We had complacently watched our navy drop from an assured second place among the navies of the world to a doubtful third, but the 63d and 64th Congresses showed an appreciation of the need of enlarging the navy, and the first session of the 64th Congress adopted a three-year program which will easily make the American navy the second strongest in the world.

But Congress and public opinion propose, while the private shipyards and industrial conditions dispose. Hence the question is pertinent, and it may become aggravating, who is going to build those 156 ships? Congress thought it took care of the matter when it authorized the construction of any of these vessels in navy yards in the event that the private yards bidding for the contracts should combine for the purpose of depriving the government of "fair, open and unrestricted competition."

But it failed to say how the ships which the navy yards cannot provide are to be got if the private builders find it more profitable to construct merchant vessels.

The navy yards, not yet prepared to add materially to the country's output, and the private yards, overflowing with orders for merchant ships, their limited facilities for building for the navy already strained by the big naval program for the fiscal year 1916, will be hard put, even after new facilities are provided, to build the ships recommended for the fiscal year 1918 and complete those heretofore authorized. New private shipyards are opening every day and the navy yards are being made fit for the construction of capital and other ships, but new yards can be provided and old ones expanded easier than the number of men skilled in ship building can be increased. Then there is the matter of materials of all kinds, the demand for which has caused a rise in price and delay in delivery.

A heavy burden has been laid on the shipyards, but the Navy Department takes the hopeful view that they will rise to the occasion and accomplish what only a short time ago was looked upon as hardly possible. It has been suggested that it may be necessary, however, to confer extraordinary powers upon the department in connection with placing contracts for the new vessels or in obtaining materials entering into their construction in order to insure the early completion of our naval program; but here immediately arises the question, shall Congress compel private shipyards and sellers of materials, in time of peace, to give preference to government contracts at reasonable prices?

Adventures of American Coal Abroad

AMERICAN coal has been having adventures in foreign lands, and American coal men as well. Very likely our coal has been too busy at home to go abroad in the quantities which might be expected at a time of world-wide coal famine. Moreover, it has met rebuff at seaboard in the form of high ocean-freight rates. The play of cause and effect will prevent our exports this year from being more than a third greater than the export tonnage of 1913, our earlier banner year, our total of bituminous for the twelve months perhaps being about 20,000,000 tons, as against 65,000,000 tons sent abroad by the United Kingdom in a normal year.

There are misadventures of excellence. One of them happened with the first shipment of American coal for the Italian railways. Our very best grade of "high volatile" coal was shipped by a firm possessed of more zeal than discretion. The first locomotive that burned this coal ran through villages which have contributed to Italy's fame for beauty, and left a pall of smoke that pretty nearly obliterated centuries of reputation. "The

Black Diamond" says that at the end of the run the engineer solemnly declared to his chief that if the stuff had not made so much steam as to enable him to run away from trouble he would have been mobbed before he completed half the route. The difficulty was adjusted when "low volatile" coal was supplied to the railway and high volatile reserved for gas plants and other consumers that have a little control over the behavior of their smoke stacks. Incidentally, Italy learned that a pound of American coal would evaporate nine pounds of water, and became very respectful.

Another firm proceeded in an altogether different fashion when it decided to sell coal in Argentina. It began by sending a salesman and an engineer to Buenos Aires. They obtained a dock, swept it of every grain of old coal, brought down a cargo, and arranged for tests on the Argentine railways. Argentine engineers at once wondered at the small consumption of American coal that produced a train mile and the Americans had a surprise in the superiority of Argentine (Concluded on page 15)

Our Job in Our Porto Rico

An Outlying Territory That Calls for Even More Intelligent and Sympathetic Study Than Territories Closer Home

By MARTIN TRAVIESO, JR., Secretary of State of Porto Rico

Photographs by Bureau of Insular Affairs

AFTER eighteen years of American occupation of Porto Rico, the government is still endeavoring to solve some of the problems which the United States, rashly courageous in its inexperience as an empire-builder, relieved Spain of when it took over as a prize of war the beautiful and fruitful island which forms the eastern limits of the Greater Antilles. To this day the country is governed by a legal makeshift which was intended to serve only until Congress should have provided a permanent organic act.

The obligations which the United States lightly assumed, in the intoxication of victory and conquest and in full belief in its own powers, it is endeavoring to discharge in its more sober moments, chastened perhaps in its self-esteem, perplexed as to the way to take, liable to be misunderstood by the people it serves.

One problem there is not ceded to the United States by Spain, that of winning and holding the confidence of the people of the island. Porto Rico, although not a rebellious colony of Spain, hailed the advent of the Americans, and looked forward to the day when the island should be a state of the Union and Porto Ricans citizens of the United States. Had American citizenship been extended to them at that time, it is probable, nay, almost certain, that not a man in the island would have declined it; to-day, it must be admitted, there is an element of the population, relatively small, however, which is indifferent.

Despite the fact that there is disappointment and a certain amount of discontent by reason of the long delay in superseding the Foraker Act, passed in 1900, by a permanent organic act, the United States has the friendship of the Porto Ricans.

That is no slight achievement. It has meant the surmounting of the difficulties of bringing to a common understanding two peoples widely separated as to origin, social and political institutions, in fact, as to every relation of life; it has



Two little Porto Rican pigs that went to market—under their owner's arms. There were 106,090 other pigs in the island in 1914 valued at \$257,645.

meant the blending of two peoples who occupied to each other the relationship of conquerer and conquered, because it must be borne in mind that when the American fleet tore gaping holes in the ancient masonry of the citadel at San Juan, it was to pave the way for an army of conquest.

The task in Porto Rico, at best heavy, is not made lighter by the fact that many people of the island feel that they cannot hope from American statesmen profound analysis of the customs, idiosyncrasies, economic condition and capacity of the Porto Ricans. A recent newspaper writer, in fact, affects to believe that American statesmen have read history to such poor purpose that they have adopted the principle of giving a dependent colony just the opposite of what it asks for, and he advises his people, in order to obtain what they want, to ask Congress for what they do not want.

But questions of government are the least of the problems crying for solution. What Porto Rico needs above all else, and there the United States cannot supply the want by legislation, it can only point the way, is economic resuscitation. The island must avail itself of the means of grace provided by nature to work out its salvation.

Of marvelous productivity, the island has committed the economic folly of restricting itself practically to one crop. Sugar rules the destinies of the country. When that fails, want stalks through the land, but when the production is bountiful and the markets greedy, prosperity reigns. Once it was thus with coffee, and, at another period, ginger.

The romance of Porto Rican sugar transcends imagination. Fifteen years ago it was predicted by "competent judges" that the sugar output of the island might easily be increased to 300,000 tons a year, worth, at the then prevailing price, \$25,000,000. During the year ending June 30, 1916, after satisfying her own wants, she exported 424,955 tons of sugar, of a value of \$45,809,445, and of molasses,

a by-product, 18,003,444 gallons, valued at \$1,211,759. The estimated sugar crop for the coming season is 510,800 tons of an estimated value of \$51,080,000. The total exports for the past year were valued at \$66,731,573, so that sugar cane products constituted almost 71 per cent of the total. That crop, however, was the largest in her history, and the price was high; so, in order to weigh the relative value of sugar, let us take the output for the five years immediately preceding the war, so there shall be no suspicion of the abnormal. During those five years the total exports amounted to \$219,790,326, an average of \$43,958,065 a year. Of this grand total, \$126,428,824, or an average of \$25,285,765 a year, was represented by sugar. Thus we see that during five years of what may be called "normal times" the exports of sugar amounted to approximately 57 per cent of the total exports.

The figures for those five years take no account of the exports of molasses. And here it may be said that the domestic consumption is so small that the exports may be taken as a fair index of the total output.

FOUR-FIFTHS of the people of the island are engaged in agricultural pursuits or related occupations, and of these the vast majority are producing sugar cane, which furnishes more than one-half of the total value of all crops grown. In 1909, the latest year for which we have census returns, there were but 939 manufacturing establishments, employing an average of 18,122 persons and laying out in wages and salaries \$4,898,000. They turned out products to the value of \$36,750,000, consuming materials costing \$21,479,000, and thus the value added by manufacture was \$15,271,000, which represents the net wealth created by manufacturing operations during the year. The manufacture of sugar and molasses is by far the most important industry in the island, however, and sugar cane furnishes about 56 per cent of the material entering into manufacturing and about 54 per cent of the wealth created by manufacturing operations.

In 1909, 72 per cent of the total value of the crops produced consisted of sugar cane and coffee, the latter being one-fifth of the total. The remaining 28 per cent represented the output of fruits and nuts, tobacco and vegetables. Tobacco, of course, was a big item, bigger, in fact, than vegetables, so that very little of what the Porto Rican raised found its way to his table. The value of the vegetables produced was no more than \$1,500,000.

During the year ending June 30, 1916, merchandise to the value of \$39,000,000, in round numbers, was imported into the country, including breadstuffs, fish, fruits and

nuts, meat and dairy products, refined sugar and vegetables, the total value of foodstuffs imported mounting into the millions. Rice alone accounted for nearly \$6,000,000.

Thus Porto Rico, instead of making it her first care to raise food for her own people and manufacture at least the bulk of the articles she requires, sending abroad only her surplus, produces almost entirely for foreign markets, depending upon them, in turn, to supply her with much of her food, cotton and woolen goods, and hundreds of manufactured products—depends upon them, in fact, for her daily bread. Could folly mount higher? True it is that just now, by grace of the high price of sugar, she is surpassing former periods of prosperity, but a hundred past griefs should warn her against pinning her faith too implicitly to one crop as a basis of national wealth.

Porto Rico should not only be able to feed herself, but she should be an exporter of foodstuffs. But before she can even feed herself, there must be an extension of the railway facilities of the country. With the exception of a few unimportant miles of track, there is but one railroad. It was begun as a belt road around the island, but the ends have not yet been brought together. The railroad does not penetrate the interior of the island, where is some of the most productive land, with the result that transportation charges on farm products often exceed the price realized for these products. The sugar industry does not suffer on this account, because the sugar cane belt circles the island, and the railroad passes through it.

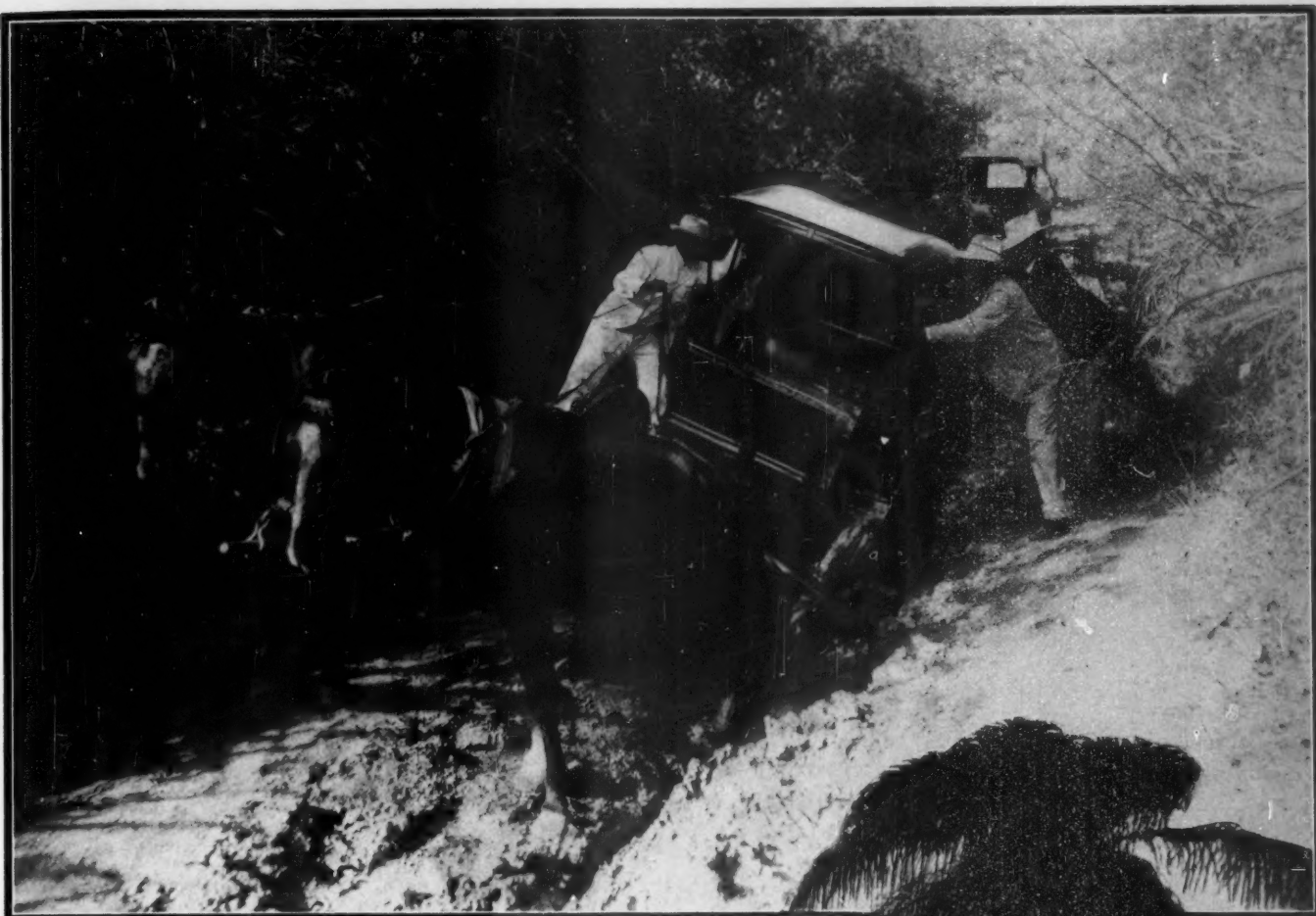
SINCE the day the United States took possession of the island, it has been telling the Porto Ricans to diversify their crops, and the advice is beginning to bear fruit. There is too an awakening interest in manufacturing industries, and during the past fiscal year about half of the sixteen new domestic corporations registered were for the purpose of establishing manufactories, but the amount of capital invested was small. Fruit growing on a large scale is another development of recent years which gives promise of better things for the island. All citrus fruits grow readily, and some districts are particularly well adapted to oranges and grapefruit. Pineapples are extensively grown and several canneries are in operation. The Porto Rican grapefruit has found favor in the United States, and a flourishing trade has sprung up between us and the island in this fruit, as well as in oranges and pineapples. The value of fruit exports has grown from \$109,801 in 1901 to \$3,355,285 in 1916.

Rice is one of the staple foods of the island, the yearly consumption being about \$6,000,000 worth, and of this

IT would take the breath of an American farmer, who grudgingly contributes his share of the \$1,800 or so that it costs to build a mile of country road in the United States, if he were called on to pay at the rate of \$18,000 a mile, which is about what it costs in Porto Rico, including the original \$15,392 for construction, changes, and upkeep for the first year or two. Steep mountain slopes, torrential rains and landslides account in large measure for the high cost of construction and maintenance. To repair the damage inflicted by the assaults of nature requires an outlay of about \$1,000 a year per mile, the appropriation for the present fiscal year for this purpose being \$500,000.

Highway building was begun almost as soon as the island was settled, and was, probably, part of the ponderous defense works maintained by Spain, and—a material aid to us in conquering the island, making the transportation of troops an easier task. When Spain gave up Porto Rico, she had 159 miles of improved roads, the average cost of which was \$21,287 a mile. There are now 675 miles of macadam roads, and an automobilist can reach every one of the island's 75 towns over an improved highway.

The government is pushing forward a comprehensive programme of road building, the legislative assembly at its last session having authorized 48 new roads and 35 new bridges, which will call for an outlay of more than \$4,000,000. Owing to its poverty, the government—which faces a deficit of about \$560,000 for the present fiscal year—despite its half million dollars a year spent in maintaining roads, must stand by and see some of the island's magnificent highways go to ruin.



Porto Rico's Spanish masters, with Mexico's silver mines to draw on, built such good roads that their American successors, counting cost of construction and maintenance, almost despaired of keeping up the standard. We have, notwithstanding, more than quadrupled the improved roads Spain left. Maintenance cost is high, because these roads must be "tied down" to keep them from being washed away.

the island produces only about \$250,000 worth. Experiments made during the past year, however, hold out the hope that she may be able to produce all the rice she requires.

The romance of Porto Rican coffee is of a piece with that of Porto Rican sugar. Sugar, in fact, has usurped the place held of old by coffee, which was the dispenser of wealth and, by turns, of poverty to the island. On the crest of waves of abundance she floated to prosperity, but, when the waves receded, she sank to misery and want.

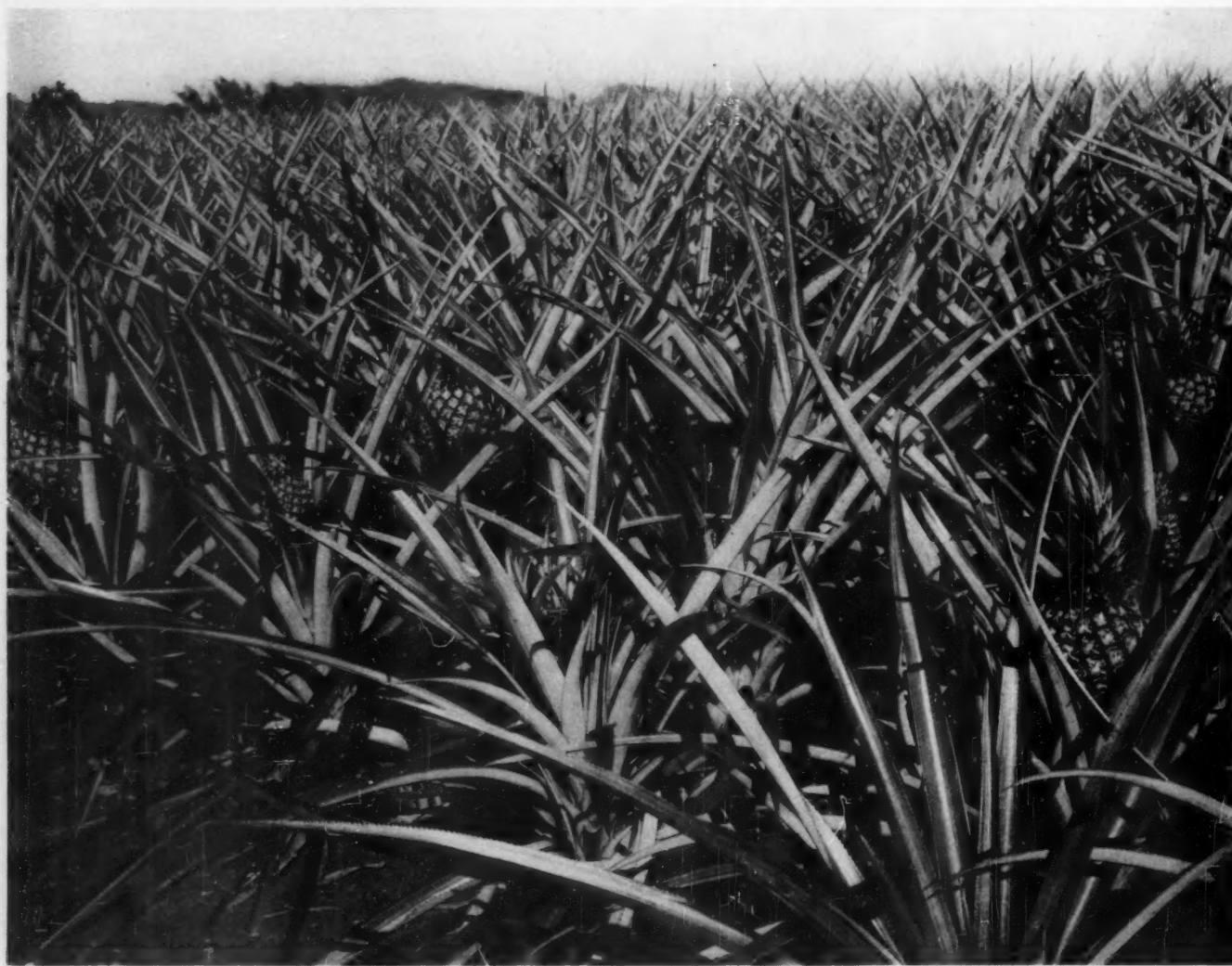
The average yield of coffee for the five years ending in 1897 was slightly over 50,000,000 pounds, rising to 64,872,124 in 1898, but from this pinnacle of prosperity she plunged the following year when the disastrous hurricane and flood of August 8, 1899, killed or drowned 3,000 persons and wiped 90 per cent of the coffee crop out of existence. Under the old regime, Spain was the island's largest coffee buyer, and this market was lost when sovereignty passed from Spain. Coffee has never entirely recovered from this double blow, but the output had increased from 12,000,000 pounds in 1901 to 51,000,000 pounds in 1915, only to drop in 1916 to 32,000,000 pounds. The industry received a fourth setback within

the short space of time spanned by the American occupation when the present war disorganized the European markets.

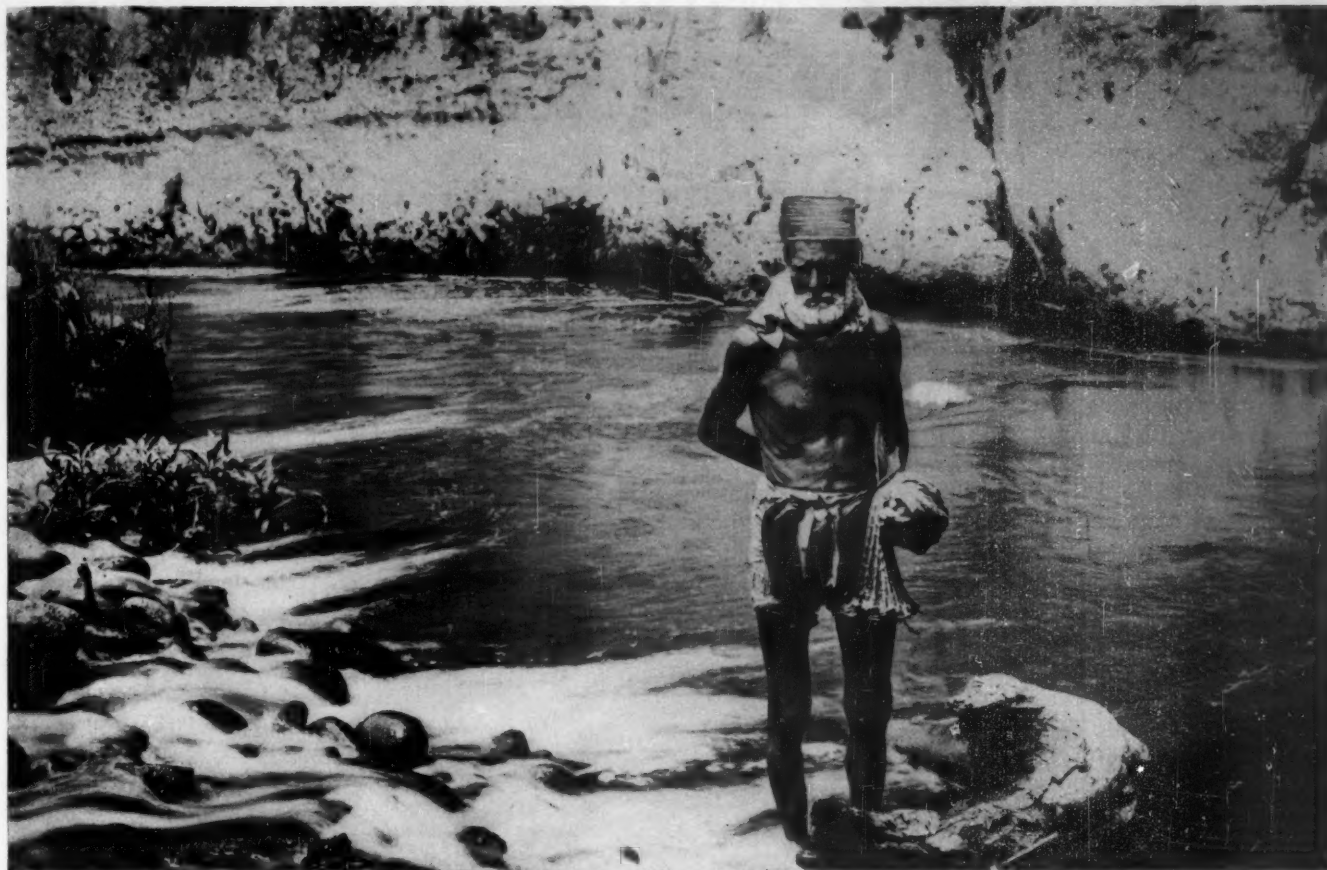
There are more than 10,000 owners of coffee plantations in the island, the great majority of whom are in need of long-time loans at reasonable rates of interest, yet several efforts made to organize banks to facilitate credit to them have failed so far. Yet the reorganization of such a bank is one of the crying necessities of the island.

While the bulk of the merchandise shipped from Porto Rico comes to the United States—we sold nearly \$61,000,000 worth in the American market during the past fiscal year as against less than \$6,000,000 worth to all other countries—the United States bought, during the same period, only \$77,995 worth of our coffee, whereas other countries bought nearly \$5,000,000 worth.

For many years the government has been endeavoring to enlarge the market for Porto Rican coffee, especially in the United States, and to that end a coffee exhibit was maintained at the San Francisco exposition, but just then Porto Rican coffee executed one of those dramatic coups which have characterized its history, by a yield 37 per cent below that of the preceding year.



This photograph deposes and says that pineapples do not grow, as a newspaper stated last month, on pine trees. Pineapples are by far the biggest item in the fruit exports of Porto Rico, reaching a value of \$1,723,863 in 1915, only to drop, owing to weather conditions, to \$1,176,406 in 1916. All citrus fruits grow readily on the island, and fruit exportation is fast becoming of major importance in her commerce. In addition to pineapples, we buy large quantities of oranges and grapefruit from our insular possession, the value of whose fruit exportations has increased from \$109,801 in 1901 to \$3,355,285 in 1916.



This Porto Rican fisherman, who is about to cast the net which he holds in his left hand, doesn't take fishing seriously, notwithstanding that it would probably yield him more profit than his work on the coffee and sugar plantations. The waters of the island abound in fish of valuable species, but there is no regular fishing industry, only a few persons devoting a portion of their time to it. Yards of statistics as to the island's sources of wealth are silent as to the quantity of fish taken, but they do yield the information that the territory imports more than \$1,240,000 worth of fish a year.

American authorities in the island believe that the government can best aid the industry by endeavoring to increase the amount and the stability of the annual production by improving methods of planting and cultivation, and that much good can be accomplished through the agricultural extension work made possible by the annual appropriation of \$10,000 made by Congress.

Government itself in the island has its financial difficulties, owing partly to the war, which, causing a considerable reduction in the value of imports, has cut down the government's revenue without any compensatory gain, and to the inadequate taxation of property. Direct taxation in most of the municipalities does not exceed one and two-tenths per cent and the taxes paid in Porto Rico are negligible as compared with those paid in Europe even in times of peace. The government is not meeting its expenses, and there is a pressing necessity to provide other revenue. Schools are needed—by straining every resource the public schools are able to accommodate scarcely one-third of the population of school age; many of the roads are going to ruin, and the health department reports that the death rate is increasing because of insufficient funds to insure public health.

The density of population of the island creates still another grievous situation. With its 3,435 square miles and approximate population of \$1,200,000, which is increasing at the rate of about 17 per cent in eleven years, it has more than ten times as many people to the square mile as the United States proper and more than three

times as many as New England. Emigration is proposed to relieve the congestion, but this would seem to be merely putting off the evil day of final settlement.

Here, then, are some of the tasks awaiting our hand in Porto Rico. They are tasks within the government and without it; they spring from economic conditions and racial peculiarities; they strain the resources of official wisdom and private enterprise. They form the greatest single piece of constructive work which the nation has before it. Their adequate performance will subserve the interests of the United States and be the realization of the dream of Porto Rico for social and economic regeneration.

This is the first of a series on our non-contiguous territories. Articles on Alaska, Hawaii, the Panama Canal Zone and the Philippines will follow.—Ed.

ADVENTURES OF AMERICAN COAL

(Concluded from page 10)

locomotives in burning American coal economically. All of this emphasizes the necessity for a firm which looks for profit in foreign trade to set about establishing its export business with the same investigation and the same care it would devote to a new departure at home. One of the American houses which deals in drugs and proprietary medicines has decided it would cost it \$2,000,000 to enter the South American field and adopt the principles of trade which are there customary. It adds, too, that it will make this investment, but not just now.

The Infant Terrible of the Railroads

State Control is Its Name, and Its Wilfulness Prompts This Question: Shall Its Uncle Take Over The Whole Job?

By FRANK W. NOXON, *Secretary of the Railway Business Association*

Decorations by CHARLES E. HOWELL

TWENTY-EIGHT presidential elections ago one George Clinton, a revolutionary general, was chosen Vice-President of the United States, completing in 1804 his eleventh biennial term as elective governor of New York State, having served 18 years successively from 1777 and returning to office in 1801 after a respite; and probably he believed, as he shed the gubernatorial burden and entered upon the lighter duties higher up, that he had in his time undergone about all the relinquishment of power that a state executive could make to the national government.

If so, Clinton was wrong. The process had only begun and the end is not yet. Morris Sheppard, a Senator in Congress from Texas, in June, 1916, appeared before a committee of his colleagues at Washington and asked them for an amendment to the Interstate Commerce act restoring to state authority over railroads what had lately been taken from it by Congress as sanctioned in the highest court. President Wilson, on the other hand, has asked Congress, and Congress is doing it, to conduct an inquiry the expected result of which is to be greater rather than less centralization of jurisdiction.

Our muscular endeavors in the present epoch to find out how to be a nation descend lineally out of that past which gave us a Constitution. The immediate cause, the prime irritant of the Constitution was George Clinton; and being the enfant terrible whose tantrums brought it about, he nearly succeeded in demolishing it when they bound it on him.

A modern Plutarch could write the parallel lives of two state magistrates—Clinton of a century ago and some one of our up-to-date governors who struggle to boost the population whom they specifically serve at the expense of the neighbors.

CLINTON, ascending the gubernatorial seat in the year following Independence, looked upon the state in which he ruled, though it was a member of the Confederation, much as a medieval baron regarded his demesne. To him everything and everybody across the border was alien. The chief end of a governor was to get all he could for his own at the expense of other "peoples." Note the plural. He had not attained, if he ever did, the

singular noun "American people." New York City was just across tranquil waters from Connecticut and New Jersey. Boats were cheaper transit than wagons and it had become a way with Manhattanites to obtain their firewood from Connecticut and their dairy products, poultry and garden truck from New Jersey. Rich trade, said the canny Clinton, to be getting away from the wood-cutters and provisioners of New York State! So the legislature looked to it.

Your Yankee sloop coming down through Hell Gate was legally bracketed in the same category with ships from foreign ports. They had to "enter" and "clear" and pay fees. Nor need they be sailing craft. A row-boat plying from Paulus Hook on the Jersey shore to the foot of Cortlandt Street—progenitor of the modern ferry and the still more modern tube—"entered" and "cleared" and paid like the rest. The state had its own tariff act also. Cargo coming in sloops and row-boats was assessed duty just like cargo from over seas.



They held a meeting at New London and agreed to suspend all business with New York.

Connecticut Yankees were of no mind to remain supine under such a course of treatment. They held at New London what one chronicle describes as "a great meeting of business men" where it was unanimously agreed to suspend all business intercourse with New York—a sort of Chamber of Non-Commerce. New Jersey, also, displayed a pugnacious spirit. New York City had lately invested in Jersey real estate. She had bought a bit of ground on Sandy Hook for a lighthouse. "Very well," quoth the New Jersey Legislature, "the annual tax upon that parcel will be \$1,800"—steep tribute for those days.

While George Clinton was the ring-leader there were others. Connecticut could start friction as well as accept challenges. Massachusetts, Rhode Island and New Hampshire virtually closed their ports to British shipping. Connecticut promptly swung hers wide open and put a duty on "imports" from Massachusetts. New Jersey had similar conflict with Pennsylvania; somebody likened her to "a cask tapped at both ends." Virginia, discriminating against outsiders in favor of her own citizens, drove a coach and four through provisions in the Articles of Confederation which guaranteed citizens of all the states equality of privileges. Maryland did likewise. Debtor states emitted paper money for use in

paying creditors beyond the border. "Everywhere," is Woodrow Wilson's summary, "there was the same jealous spirit, the same striving for every paltry advantage, the same alert and aggressive selfishness; and the more the states deemed their interests antagonistic the more like a rope of sand did the Confederation become."

PLUTARCH'S present day comparison of the "alertly aggressive" Clinton might be with Oscar B. Colquitt. This statesman was for eight years a Texas Railroad Commissioner and for four years Governor of Texas. It was during the period when Texas was pursuing toward railway rates a policy which Franklin K. Lane, then Interstate Commerce Commissioner, pronounced "frankly one of protection to its own industries and communities." What Texas had was a system of preferential freight rates. If a dealer in bakery goods at Shreveport, situated about 40 miles over the Texas boundary in Louisiana, undertook to ship a box of tea wafers into Texas a freight rate of 60 cents would carry this confection 55 miles. A rival purveyor of such delicacies at Dallas for 60 cents could ship the same parcel 160 miles. Rates fixed by Texas, coupled with ocean rates to Galveston, control to a large extent the interstate rate structure from New York and many other centers to Texas points. Texas has other devices for feathering her own nest. She makes railroads traversing her acres maintain Texas corporations with headquarters and officers, although the same railroads are satisfactorily serving the people of other states from a system headquarters through one set of officers. Rate payers all along the line have to help pay for this waste of expense.

So much for Texas. Probably our Plutarch of the future will put everything on Mr. Colquitt just as I am burdening the late General Clinton with all the deeds of governors and legislatures which precipitated the Constitution. Such a Plutarch will find instances to illustrate various forms of aggressive protection to hearth and home collected from numerous states for him to fasten upon Texas and Mr. Colquitt.

Missouri, by fixing state rates between St. Louis and Kansas City, controls the rates between points in Illinois and Indiana and points in Kansas and Colorado. Rates made in Ohio influence rates from Ohio into Indiana and Illinois. Georgia state rates, coupled with ocean rates to

Georgia ports, determine charges from New York and Philadelphia to Georgia points and other points in the Southeast; this in turn forces schedules from Louisville, Cincinnati, St. Louis and Chicago to the same Southeastern points. It is estimated that passenger fare laws of Ohio, Indiana, Missouri and Illinois caused between 1906 and 1913 a

loss of about \$18,000,000 upon 10 carriers—a loss which was made up at the expense of people in other states either by undue elevation of rates or by impairment of service.

THE Colquitts of this, that and the other state, what have they not done? The carrier having, say, a reasonable supply of cars, is required by one state to abandon its pro rata distribution in time of largest demand and under pain of heavy fines to furnish cars within that state in a prescribed time after a request. Three states make it illegal for a road having repair shops in the state to do repairing elsewhere. Fifteen states impose severe penalties for falling short of a minimum rate of movement per day for freight cars which cannot be attained on the average and would involve slower movement in other states to speed up in the states imposing such regulations. The unnecessary extra man carried in compliance with a full crew law of one state is carried across another state whose people help pay his superfluous wage. Each state in some instances has its pet brand of headlight—a measure of duplicate expense all round. New Hampshire having refused to concur with Massachusetts in a financial plan for the Boston & Maine Railroad, that line went into the hands of a receiver.

Study this quotation from a celebrated source:

"These unspeakably stupid and contemptible local antipathies are inherited by civilized men from that far off time when the clan system prevailed over the face of the earth and the hand of every clan was raised against its neighbors. They are pale and



Among the states, "there was the same alert and aggressive selfishness"—Woodrow Wilson.



A row boat plying from the Jersey shore to the foot of Cortlandt Street, "entered" and "cleared" like any liner from Hamburg.

evanescent survivals from the primitive warfare and the sooner they die out from human society the better for every one. . . . The only thing which can finally destroy them is the wide-spread and unrestrained intercourse of different groups of people in peaceful social and commercial relations."

No, this is not a contemporary comment upon state rivalries in the regulation of railways. It is the opinion of the historian John Fiske upon the conflicts under the Confederation which led to the adoption of the Constitution. The vividness of the language and the patness of its application to present conditions illustrate how long it takes, if the event ever really occurs, to put fully in play all the latent powers of a social compact, written though it be and that precisely. How little of what was to happen and no doubt will still happen actually did happen to Governor George Clinton before a magnanimous electorate set this local-rights zealot to preside over the Senate of a United States!

EVERY one of his prerogatives went down fighting for its life. When it became evident that all 12 of the other states were ready to give Congress a revenue by federalizing the tariff Clinton held out for appointing the collectors, even though Congress was to take the proceeds; and his Legislature refused to sanction the amendment, which was void without unanimous vote. This feudal system led the Virginia House of Burgesses in 1786 to invite delegates to a conference at Annapolis, out of which grew the constitutional convention in Philadelphia. When that body had done its work and even the reluctant and recalcitrant New York had ratified, Clinton felt himself a subject satrap under an empire. The central government could regulate all his regulations affecting commerce with foreign nations and among the states. He was forbidden to give preference to his own port over ports of other states or to make boats from other states "enter," "clear," or pay. The tariff was wrenched from his hands entirely. He could not maintain troops or ships of war in time of peace. The fathers deprived him of the dearest baronial privilege of all—the right to make war. What happened or was to happen before Clinton left the governorship, was this—that the popular mind was as fully habituated to esteeming tariffs, navigation laws and means of common defense federal as it had previously esteemed the postal service federal.

New York State does not always "get rid of" her governors by promotion to the vice-presidency. She still had Clinton on her hands—or at least the parochial spirit which animated him. The invention of the steamboat found the Empire State conferring upon Fulton and Livingston exclusive right to navigate

therewith all waters within its jurisdiction. New York courts stood by their own. When the case got to John Marshall, Chief Justice of the United States, he pointed out that if Congress had power to regulate commerce among the states the federal permission for steamboats to pass from one state jurisdiction into another would be cancelled by an exclusive state license, which was therefore void and as if it had never been. As one learned commentator has solemnly observed: "How could Congress regulate commerce if the states could pass countervailing regulations?"

It being thus settled that state laws regulating interstate commerce must yield when they come into collision with the laws of Congress, popular thought entered upon the unending process of finding out that one thing after another is commerce and is foreign or interstate. For instance, Marylanders got the notion that they could license and tax goods imported and wholesaled. The court shook the scales from other eyes. Missourians had to be "shown" that they could not discriminate by taxation in favor of their own manufactures and against those of other states. "Thou shalt not," said the court to New Jersey, "lay a distinctive tax upon the transportation of goods and passengers from one state to another by an outside corporation." A footnote attributed to the late E. L. Pierce and apparently written in the 60's remarked: "An important question is whether Congress may not legislate upon some, if not all, of the subjects of commercial law before mentioned, so as to produce a general uniformity throughout the union. Why, for instance, might not the law relating to insurance and to negotiable paper be made the same in all the states? It is contended by very able lawyers, among them Judge Redfield, that under this clause, and also that giving power to establish post routes, Congress can regulate, by legislation, railroads running through different states. This may become very important, considering the immense power of the large corporations which are growing up among us, and the prominent position they hold in conducting the commerce of the country."



IN due course this prophecy, though not so far as it touches insurance, was fulfilled and the same court which had said that the power to regulate commerce involved the power to regulate navigation had adapted that principle to interstate commerce by rail. When the first American steam railroad was laid down in South Carolina the builders created an instrumentality of commerce within a state. The hand

of Uncle Sam was ready to grasp interstate commerce by rail when human cunning should in the process of the thing. Morse stretched the telegraph between Baltimore and Washington. (Concluded on page 23)

Speaking of the Clam—

THE Filipino, who is digging clams in the lower right hand corner, finds "little necks" as toothsome as we do. The clam, popular name for various bivalve mollusks and some persons, is found in many climes and under many scientific aliases. He is the Indian's *quahog*, the New Yorker's *Mercenaria mercenaria* ("hard" clam) and the Bostonian's *Mya arenaria* ("soft" clam). But let him hide under whatever Latin name he will or dig his way deep into the sands of the seashore, he cannot escape man's searching eye.

There are, however, several species besides the human which are not edible. Speaking parenthetically, the clam figures in heraldry as well as on the dinner table. If, therefore, the man who designs your coat of arms sketches a clam rampant on the escutcheon, don't take offense, for he may be paying you the delicate compliment of insinuating to the knowing that you are the descendant of a crusader or of one who made long voyages by sea—Columbus, perhaps—because that is what the clam on a knight's shield meant.

There are several species of edible clams dear to the palate of the Filipino. The shells of the giant clams of the genus *tridacna* sometimes attain a length of five or six feet and weigh hundreds of pounds. The giant species of the East Indies is the greatest of living mollusca, containing as much as 20 pounds of edible flesh, while the deeply hollowed shell, the inner surface of a beautiful whiteness, finds its way to European churches as holy water fonts. The shell-shaped sounding boards seen over pulpits in the United States may be a reminder of another use to which clam shells have been put. These shells also furnish natives of the Philippines and other far-Eastern islands with knives, axes and ammunition. The *tridacna* shells are so hard that the Moros used to pound them up and ram the pieces into their rude cannon, making projectiles which were peculiarly effective at close range. Burnt, the clamshell becomes the Filipino's lime; salted, the American clam becomes the New Englander's bait in cod fishing.

Clams are an important food product in the United States as well as in other countries, and the "soft" clam is much cultivated in New England, both in order to restore depleted areas and because the cultivated clam, which brings a better price than the natural growth, is more uniform in size than the latter.

Early experiments in clam culture were made at Essex, Mass., an act of the Legislature authorizing the selectmen of the town to stake off in lots of one acre or less the flats along the Essex River and let them to persons desiring to "plant" clams. Small clams were dug on the natural beds and planted on these hitherto unproductive flats, about 500 bushels being required to plant an acre.

The commercial value of the clam is considerable, but it has been found that in order to insure a prosperous indus-

try clams should be planted and not left to chance natural set. During summer young clams are set in large numbers, close together, and, if allowed to remain congested, will die. To collect seed for planting, these small clams are dug with an iron fork, and dropped in clusters of from 10 to 12 at regular intervals of about one foot in long furrows dug about a foot apart. The tide covers the furrows and the clams start to burrow. They require no further attention until dug, unless it be to inspect their quality. In favorable localities, cultivated clams will mature in from 9 to 14 months after planting, while those from natural beds usually require from 2 to 3 years. At Plymouth, Mass., where the natural beds were exhausted and there were scarcely any clams left in the bay, the introduction of scientific methods restored the clams to their former abundance. The latest statistics available show a year's catch of 16,983,000 pounds for the United States, at a value of \$1,916,000.

The clam is more or less an object of terror in the East as well as in the West; here we eat it with an uneasy feeling that it may be the cause of internal midnight disturbances, while in the Philippines divers fear the giant species, which closes with a vise-like grip and drags down to drown any unlucky native that it happens to entrap. Hence the American fashion of catching the hard clam by wading about "feeling" for it with the toes is not popular with Filipinos who go clamming for the big species.





Concerning Sugar

An Interview with Charles O. Townsend,
the Government's Chief Sugar Expert

By JAMES M. BINKLEY

Decorations by H. DEVITT WELSH



EACH person in the United States, at the present price, say, eight cents a pound over the counter, is yearly consuming \$7.20 worth of sugar.

A man and his wife, then, pay, directly and round-aboutly, \$14.40 for that small item of their living. Add two children to the family and the sum is doubled; add four children and it is trebled.

There are 100,000,000 people (estimated) in the country. The sugar bill of the nation, accordingly, is \$720,000,000. Of that amount, at least \$200,000,000, normally, is paid outside the territorial boundaries of the United States—mostly, indeed, to plantation owners in Cuba.

The balance, \$520,000,000, is widely distributed—first, of course, to cane and beet growers. Refiners, as in cane sugar, and manufacturers, as in beet sugar, are receiving comfortable dividends on the capital they have put into their business.

For example: The \$100 shares of the Great Western Sugar Company are selling at \$450 apiece. A stock dividend of 42 per cent was declared recently. The dividend of one shareholder, the American Sugar Refining Company, had a value of \$15,000,000.

Freights, water and land, are also charged against the consumers. The retailer's profit by the pound is atomic but bulks large on 4,500,000 tons, the year's supply of the nation.

Of the four and half millions tons, the United States, between the oceans, east and west, and Canada and Mexico, north and south, produces 20 per cent, or, in round numbers, 100,000,000 tons. The remainder is bought in Cuba (55 per cent) and in Porto Rico, Hawaii and the Philippines (25 per cent).

Roughly, 3,500,000 tons of raw cane sugar is imported yearly. At four cents a pound (see the daily newspapers for a verification of the quotation) the price is \$80 a ton. The gross expenditure, therefore, is \$280,000,000.

It is said that every penny of that immense sum ought to be kept at home. Preparedness, as a policy, first began with the navy and the army. The question then slowly widened. Banks were thrown into the scheme. Next, were included factories, mills and furnaces.

By and by, orators, publicists and writers began recruiting the spirit. The heart had to be right and ready as well as the hand and fist. Now, lagging behind until the last, agriculture takes its place in the line of national defense; and offense, if any invasion occurs, as some predict.

SUGAR, in this division of the forces of preparedness, is up near the colors and the fife and drum. Marching at its side is wool; but wool is a matter in itself.

Cuba is the foster-child of the republic. Porto Rico, Hawaii and the Philippines are actual members of the republic. Advocates of agricultural efficiency say that the four islands should be treated generously, but that continental United States—Maine to California and the lakes to the gulf—should, within itself, grow all the sugar that it eats. The island crops, so the argument proceeds, could be sold somewhere else.

Working steadily at the foundations of the national sugar industry, though unseen by the public, Charles Orrin Townsend, an officer in the Department of Agriculture, believes that substantial progress is being made. He expects to see hundreds of sugar factories built at no far away day in the United States.

By profession, Dr. Townsend is a botanist and plant physiologist. Sugar beets have been his specialty in recent years. He has planted wild ones and studied them as they grew. At present, he is breeding beets so as to get a profitable family of pure strain, full of sugar and lean in salts.

A student at Ann Arbor, he took care of a horse for his lodgings and ran a boarding club for his meals. Valuable were experiences, so he says. And kindly, when compared with the schemes and shifts by which some

other students lived.

"I met a dusty youth with a buck-saw across his shoulder," he told the writer of this article. "He had walked from New York to Michigan, sawing wood in villages and on farms. I asked him if he had any money. 'Not much,' he replied. 'I mean,' he said, 'to saw my way through the university with the trusty implement on my back.'"

"Another student, a famous chemist at present,

COTTON, corn, wheat and sugar—these four tales of the nation's business have been engagingly told by Mr. Binkley. Our readers will be appetizingly served with rice in the February issue. It will be followed by a human and philosophical yarn concerning tobacco.—The Editor.

worked in the packing-houses of Chicago during vacations, coming back to Ann Arbor each autumn with his hands cut and scarred by knives and sharp bones. This man, a Russian immigrant long ago, has won medals in chemistry and is a member of scientific societies in this country and Europe."

YOUNG TOWNSEND himself taught school and with money thus earned took a course and obtained a degree at the University of Leipzig. His interest in sugar beets began while he was in Germany, nineteen years ago. He saw crops growing and factories in operation.

It was Andreas S. Marggraff, a great German chemist, who discovered, in 1747, that wild beets along the Mediterranean contained sugar. A factory was not built, however, until the year 1801. The projector of the factory, Franz Carl Achard, had been a pupil under Marggraff, at the Academy of Sciences in Berlin. The portraits of these two men hang on the walls of Dr. Townsend's office.

"Beet sugar was not successfully manufactured," Dr. Townsend said to the writer, "until after 1830. Factories were then built in Germany and France. There were 400 of them in Germany at the beginning of the present war in Europe. Sugar was being sold to other countries. At one time considerable quantities were exported to the United States. The 400 mills in Germany were making 2,855,000 tons annually. Russia was making 2,325,000 tons and Austria-Hungary 1,679,000 tons.

MANY years ago attempts were made in Massachusetts, and in Illinois to manufacture sugar from beets. The undertaking, however, was not successful. The industry really started in this country with the factory—still in operation, although built in 1879—at Alvarado, California.

"There are now eighty-four factories, sixteen of which are in Michigan, fifteen in Colorado, thirteen in California, eight in Utah, five in Ohio and four in Wisconsin. The others are in Arizona, Idaho, Indiana, Illinois, Iowa, Kansas, Minnesota, Montana, Nebraska, Nevada, Washington and Wyoming. Seven new factories have been built during the past year."

"The business, then, must be highly profitable," said the writer to Dr. Townsend.

"There are several ways of figuring profits," Dr. Townsend answered. "Men make fortunes on paper in the matter of hens—so many eggs per day and so many chickens at the end of the season and so on, year after year, until the earth contains nothing but poultry. If the sugar content in beets is 14 per cent, say some of the mathematicians, then a ton will make 280 pounds of sugar.

BUT the content, when the beets go through the factory, is likely to fall far below 14 per cent. Furthermore, the quantity of salts in the beets will not remain negligible and salts retard and often prevent crystalization. Nevertheless, the profits just now, no doubt, are satisfactory. In normal times they average, perhaps, with other lines of manufacturing. Formerly, factories were not always wisely located. Some, consequently, had to be closed or moved to other locations.

Transportation charges, if beets are hauled long distances, hurt the grower and the sugar-maker.

"Factories now are built in the midst of regions already planted in beets. Capitalists who purpose to establish a factory in a certain territory begin by getting the farmers interested in beets as a crop. They may even have the first beets grown shipped to factories several hundred miles away and give the farmers some concessions in the matter of freights.

"Once the growing of beets is well under way throughout a community, a factory is put up. Considerable money is required. A factory that can handle 100 tons of beets a day costs \$100,000. Figuring as to cost starts on that basis, although factories of such a size are not built nowadays. A 500-ton factory,

therefore, costs \$500,000 and a 1,000-ton factory \$1,000,000—tons meaning beets, you understand, and not sugar.

"The largest mill in the world is at Spreckles, California. It slices 3,000 tons of beets a day. The sugar-making season, it also must be remembered, is short. One hundred days is called 'a profitable run.' The manufacture of sugar begins with the harvest of the beet crop and continues until freezing weather in the fall.

"Factories, you see, and the capital invested in them are idle about nine months of the year. During the winter the sugar beet industry is at a standstill except the branch of it devoted to the sale of manufactured stock on hand. Early in the spring, the planting begins. It takes 5,000 acres of beets to supply the raw product for a 500-ton mill. As many of the mills can slice 1,000 tons of beets in twenty-four hours, it requires 10,000 acres to keep them up to capacity, which means a field fifteen miles long and fifteen miles wide.

THIS year, 70,000 farmers planted 700,000 acres in beets. The average yield ordinarily is ten tons to the acre. Some farmers, however, get twenty tons. Germany averages nearly fifteen tons. One man can plant, cultivate and harvest ten acres. If he has good land and has thoroughly mastered his business, he ought



to grow fifteen tons per acre. His crop, then, would be 150 tons, which, at \$6 a ton, would sell for \$900.

"If a farmer were to plant 100 acres and hire nine or ten men to help him, his returns at the end of the season would give him a handsome profit. Beets this year were worth \$6 a ton. Growers have a choice of two contracts with the factory owners. They can sell their crop at a fixed price, even before plowing is done in the spring, or they can wait until harvest time and take the going price at that time.

"The standard beet, on which values are based, must contain 14 per cent of sugar and must be 80 pure in quality—quality meaning the absence of mineral substances. It takes from four to five tons of beets to make a ton of sugar. We are trying to develop a variety with a high content of sugar and a low content of salts.

"Before the war, seed used in the United States came from Germany, principally, going into the hands of dealers there from the growers in Russia. The price for a long time was ten cents a pound, which was at the rate, perhaps, of \$3 a bushel.

"The scarcity of seed during the past season, imports from Germany being cut off, reduced the acreage of beets in this country and closed several sugar factories. Seed-growing is an industry in itself and is a two-year process. Seed planted in the spring will produce beetsearly in the autumn. The beets are taken from the ground, kept through the winter and put back into the ground, like tulips and other bulbs, the following season. These are the beets, which, running to tops and blooming, produce the seed.

AMERICAN farmers, so far, have bought their seeds at a cost of about \$2 an acre. Some of the sugar companies, because of their experiences brought about by the war, are preparing to engage in the seed business on a large scale. Several of them have combined and will use 4,000 acres in the West for the production of seed for themselves and others.

"There are no pure strains of sugar beets in the country. If there are any in Europe, the dealers and planters there are keeping the fact to themselves. Breeding experiments by experts in the Department of Agriculture have not, as yet, been entirely successful but we hope to

obtain a beet finally that will be rich in sugar, lean in minerals and suitable for our soils and climates.

"Sugar beets can be grown from Maine to California, east and west, and from the Great Lakes to the Ohio River, north and south. Cool nights and moderate temperature during the day seem to be necessary for the production of sugar. With such a vast area for the growing of beets, there is no reason why we cannot make

all the sugar we need at home and, possibly, have a surplus to sell in other parts of the world."

"How is sugar made from beets?" Dr. Townsend was asked.

"Well, let us start with the beet itself," he answered. "It is white in color and looks, in form, like a huge carrot. The round seed from which it grows is really a ball of small seeds held tight together. Drilling is the usual method of planting. The plants, therefore, are in continuous rows across the field, each ball of seed producing its own little cluster.

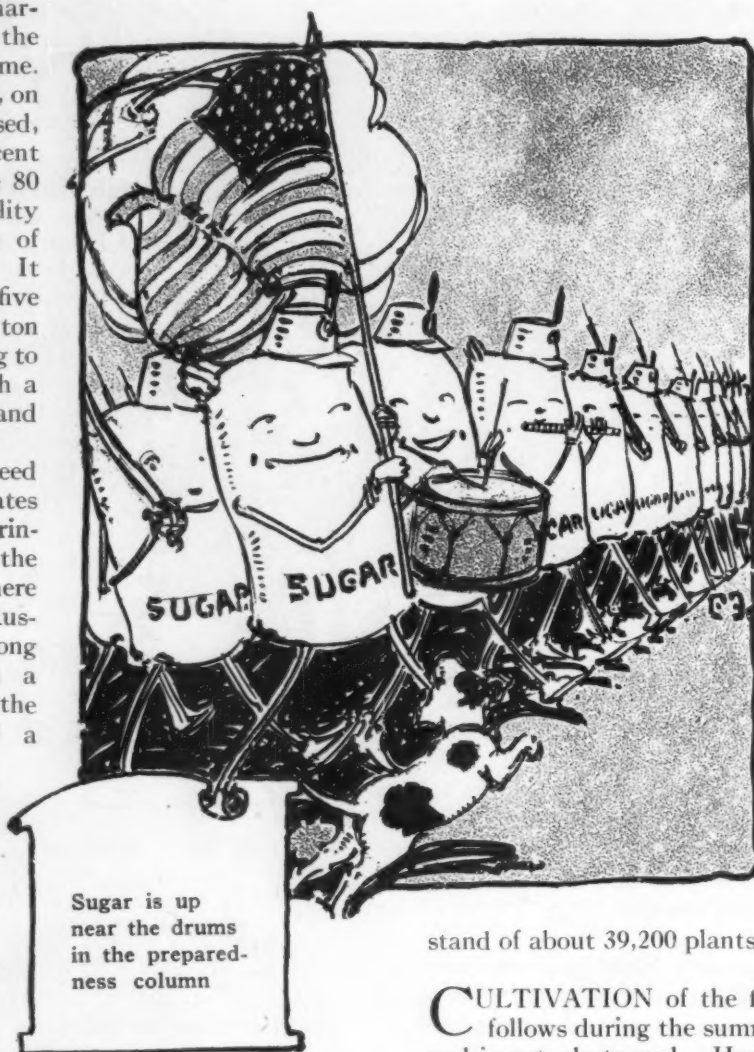
"The farmer, with a small sharp hoe, chops out the young plants, leaving clumps, each the growth from a single seed, about eight inches apart in the rows. Later he thins the clumps by pulling up all the plants but one. Thus he obtains a

stand of about 39,200 plants to an acre.

CULTIVATION of the field, as a matter of course, follows during the summer. Weeds are kept down and insects destroyed. Harvesting consists in loosening the beets with an implement and then pulling them out by hand. The beets are piled in the field and, later in the day, the tops are cut off with heavy knives. The tops are fed to live stock and must be counted in when an estimate of the value of the crop is made.

"The beets are hauled to the factory by wagon or shipped by railroad. They are placed in water and washed and are then carried to the slicing machine and made into 'cosettes,' as the thin ribbons are called. Sugar is extracted from the cosettes by the agency of hot water and from the hot water by evaporation.

"Four or five tons of beets, reaching the factory at 8 o'clock in the morning, are converted into a ton of sugar at the same hour the next morning. They start into the machinery at one end of the factory as beets and leave the machinery at the other end of the factory as dry, white sugar in muslin bags of different weights. The cosettes are taken back to the farms whence they came, and are fed to cattle and other animals."



"What is the difference between cane sugar and beet sugar?"

"There is no difference, although many women hold to a contrary opinion. Most of the sugar consumed in the United States is manufactured from cane. Cuba, Porto Rico, Hawaii and the Philippines send us raw cane sugar. The refining is done in this country. Cane sugar is also produced in Louisiana.

"Our imports of sugar total 3,500,000 tons a year. We make 1,000,000 tons from beets and cane grown in this country. Of that quantity, about 700,000 tons are manufactured from beets and about 300,000 from cane.

SO much has been said, however, especially by professional cook-book writers, about the difference between beet and cane sugar that we concluded to ascertain the truth for ourselves. Both kinds of sugar, therefore, were sent to one of the most widely-known of our female cooks so that experiments could be carried on with all kinds of fruits.

"Jellies and preserves were made and fruits were canned with both kinds of sugar. So far as taste, appearance and keeping quality were concerned, there was no difference whatever and so our expert reported. We sent the jellies,

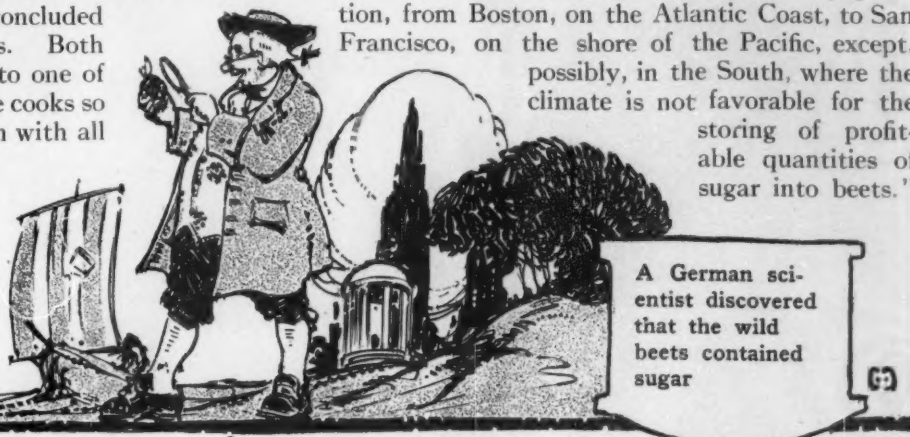
preserves and so on to the exposition at Portland and they were so good that they never came back."

"Can beet sugar be manufactured more cheaply in Germany than in this country?"

"Undoubtedly it could before the war," Dr. Townsend replied. "Seed there cost less than it did here. The same was true of farm and factory labor.

"What will occur in Germany when the fighting is over can't be foreseen. Labor may be dear. I am not thinking, however, about sugar-making in Europe. My interest is in the United States. I would like to see enough factories in this country to supply our people with every pound of sugar they consume.

"The land is ready for the plow and factories can be built near every large center of our population, from Boston, on the Atlantic Coast, to San Francisco, on the shore of the Pacific, except, possibly, in the South, where the climate is not favorable for the storing of profitable quantities of sugar into beets."



THE ENFANT TERRIBLE OF THE RAILROADS

(Concluded from page 18)

He had brought into the world full-fledged an instrumentality of interstate commerce. There was the power of regulation waiting for it; although Congress did not exercise this until the end of the first decade of the twentieth century. Alexander Graham Bell talked over the telephone from one room to another in Boston with his friend Watson. No amendment to the Constitution was required between that day in 1876 and the day in 1910 when Congress authorized the Interstate Commerce Commission to regulate lines over which interstate intercourse was conducted. So with express and pipe-lines.

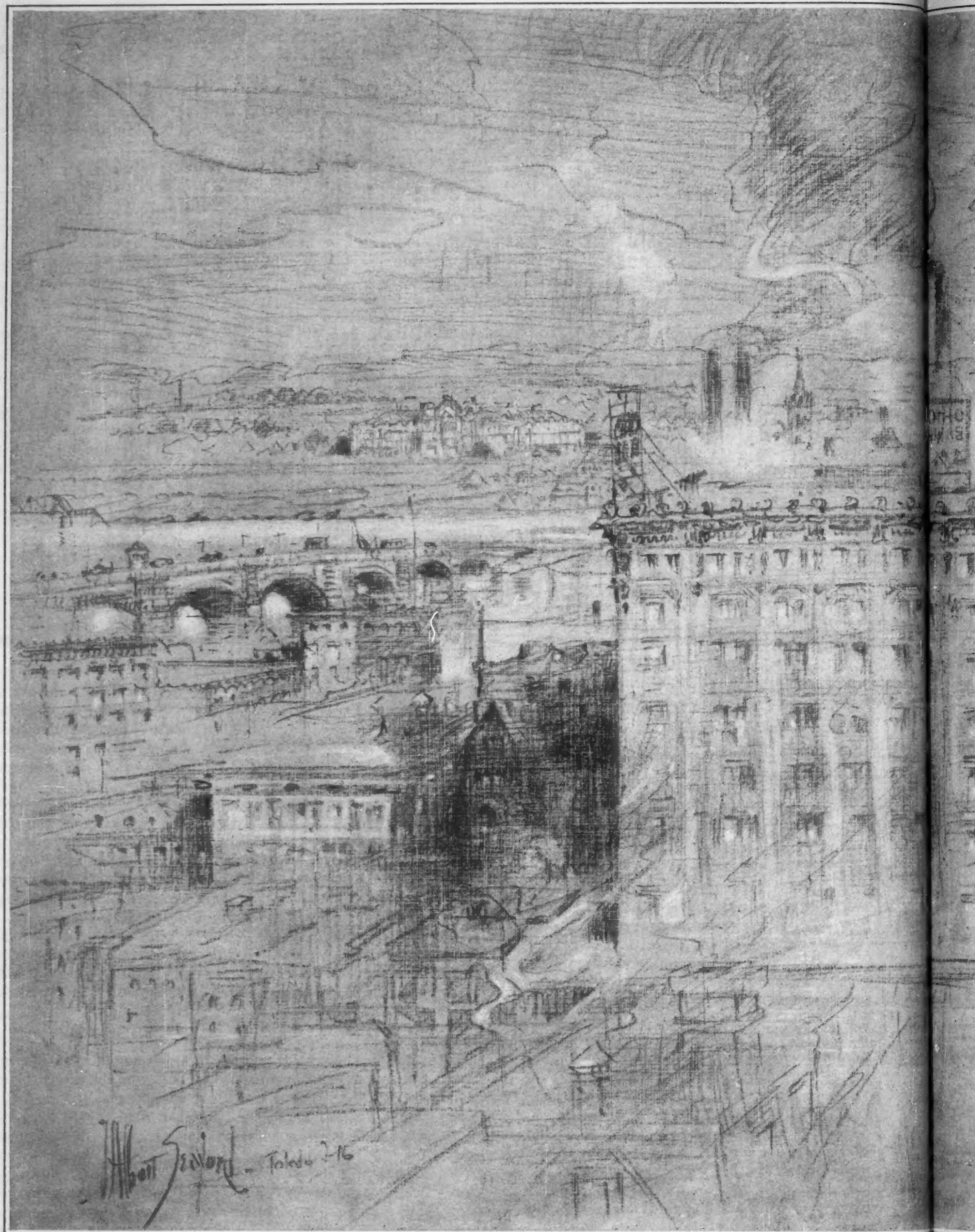
Some months ago a number of New Jersey business men discussed certain proposals for enlargement of federal scope in the regulation of railways. Congress was then about to organize a joint committee of both Houses to consider these and other proposals for correction of defects in railway regulation. Two of those present manifested anxiety.

One asked: "Would you turn over to the Interstate Commerce Commission all the functions that are now performed by the Board of Public Utility Commissioners of New Jersey?" To this another replied: "I specify three particulars in which it seems to me wise that the federal power should be exercised—compulsory incorporation, exclusive regulation of security issues and regulation of rates where they affect interstate commerce. What may be urged by others now or in the future as a desirable subject of federal regulation I do not predict. As to the power, nothing new is needed. Federal

jurisdiction has from the ratification of the Constitution been complete over whatever affects interstate commerce. The question with regard to any sphere is this: First—does it affect interstate commerce? Second—is it desirable at this time for Congress on behalf of the states to exercise regulation over it?"

The other Jerseyman inquired: "Aren't we going to get into a whole lot of trouble? Where will this lead to? How do we know that Congress may not want to regulate insurance and manufacturing processes?" The answer was this: "What do you care where it leads? If a certain class of transactions are interstate and the practical situation demands unified regulation the question of exercising the power is wholly one of popular consent or demand. In the case of railroads we have already been up through the Supreme Court and found out that the power is there. Why worry? If any business is interstate and can best be regulated federally, let us go to it."

THE thought that if a thing becomes interstate it thereby becomes national and should pass under federal supervision is still laboriously making its way. Thus obstinately does the mind of man cleave unto an idea many times abandoned if only it appear on each new occasion in slightly variant disguise. It has been obvious during the last year that rapid and pervasive progress was being made in reconciling citizens of every section to the idea that if commerce is interstate the conveyance should be regulated federally wherever the conveyance might be located. We shall shortly know how strong that conviction has become by the headway it proves to have made in Congress.

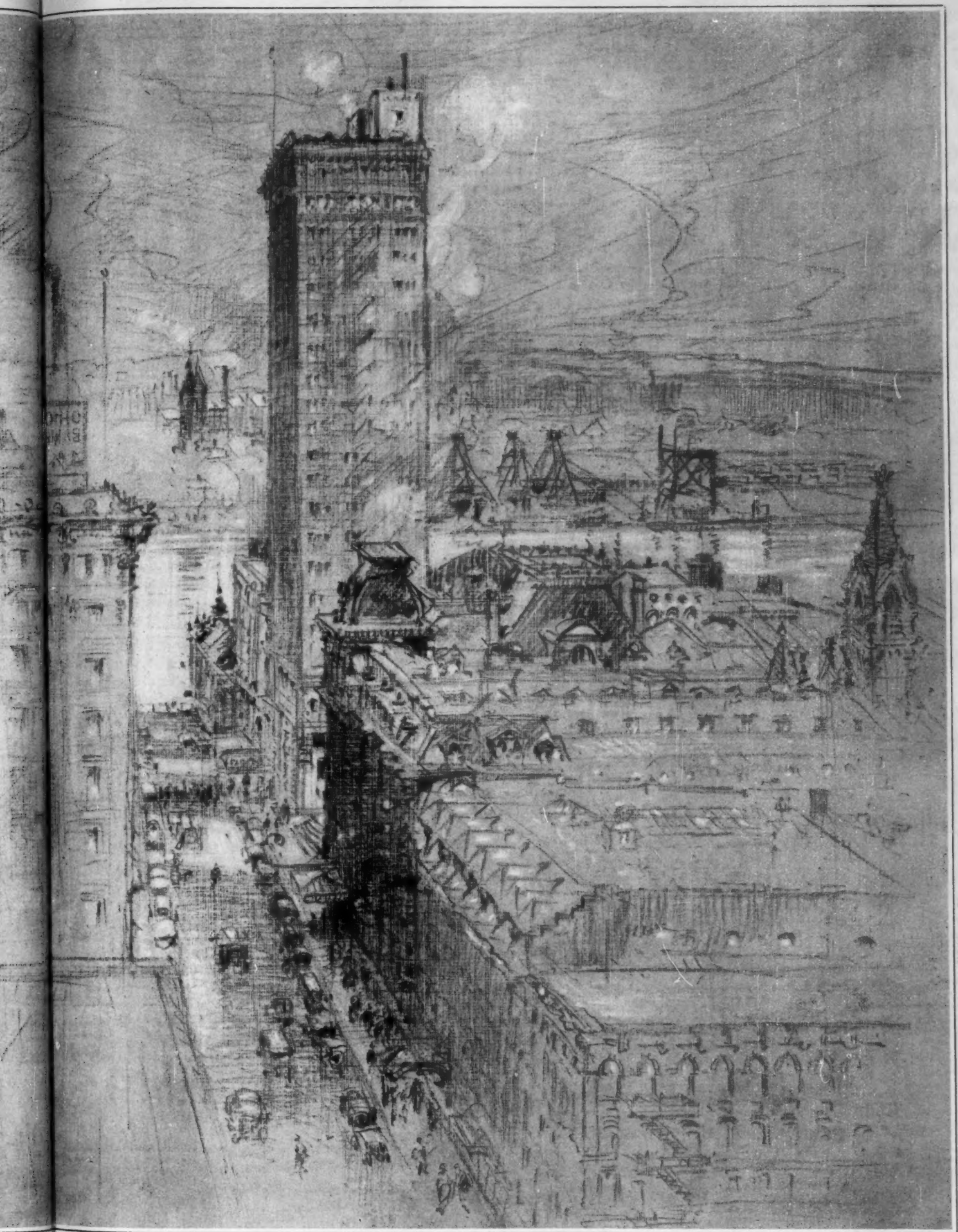


FROM A SKETCH BY ALBERT SEAFORD

THERE is a beauty about the American city not at first apparent to those who know not how to look. Men have built cities in which to toil that they may live and the industrial note is the note of creation. Thrown out across the skyline there is a scenic crescendo of towering buildings, factory stacks and canyoned streets; a riot of greens and

browns and granite grays reduced to somber harmony by a pall of smoke which is the outward evidence of the industrial heart-beat and even here and there a touch of the old world's grace and beauty. Here in Toledo we find skyscrapers rising without ornamentation, simple straight lines, and alongside these, lower buildings displaying the last word in artistic ornamentation. Here we have the architectural

ancient Greek and even the harmony we gaze at, to no



by a pall of ancient Greece and Rome mingled with that of the Spanish Renaissance and even of the Orient; a riot of individualism, a harmonious mentation harmony to him who sees the beauty because he reads aright. s displays we gaze upon this picture we seem to hear the roar of the city's architectonic, to note the ceaseless stream of goods loaded and unloaded at

its doors, to see it taking its part in the nation's business and of the world. We hear the rising diapason of industry and the very airs vibrant with its action; and out of it all we seem to know that there is a nearby part of the city where there are homes and parks and playgrounds which are born of the din.

The Puissance of the Peanut

The Humble Goober, Ridiculed and Scorned, Plays a Hero's Part
in the War Against the Boll Weevil

By F. S. TISDALE

WE thought we'd treed a squirrel—and it's a lion!" Into this exclamation R. E. Coleman, a cotton oil manufacturer of Comanche, Texas, compressed something of the astonishment of his state and of the rest of the South in the sudden and dramatic development of the peanut industry.

A few years ago the peanut occupied such a humble position in the vegetable society of the nation that it hardly could be mentioned seriously. It was a synonym for all that was worthy of ridicule. "Peanut Politics" was the generic insult for the meanest form of partizanship. We tolerated the goober as a companion of our lighter moments. When the circus came to town we bought a bag of them and fed the children therewith. Persons in unpretentious movies ate them in the dark with a disagreeable crackling sound and left the shells on the floor to be stepped on as they walked out.

To be sure there were areas in Virginia, the Carolinas and Georgia where peanut raising has been a big and since

Colonial times
serious business
—but to the vast



This boy probably doesn't know it, but he is buying one of the most valuable and cheapest of foods. Ten cents worth of peanuts has as much nutriment as 20 cents worth of porterhouse steak or 36 cents worth of milk. The goober is up in the class with the lofty egg.

majority of Americans this subterranean bean was tolerated as the jester of the vegetable kingdom.

Observe what has happened. From its former debased plane the peanut has leaped to a place of honor among the nation's crops. In 1908 the peanut yield was estimated to be worth \$12,000,000. A conservative valuation of the 1916 peanuts is \$56,000,000. This season the state of Texas alone planted over 200,000 acres. Statistics of former years are elusive because the crop was considered so unimportant that little was done to collect figures concerning it. What has happened in Texas has been repeated on a smaller scale in the other Southern states. Representatives of the Bureau of Plant Industry of the Department of Agriculture recently completed a tour of the peanut growing districts because the government realizes that the crop has become suddenly one of great importance and of almost boundless possibilities. From their figures it is said that the year's crop will be 50,250,000 bushels and will sell at about \$1.10 a bushel.

NORFOLK, to a large extent, sets the price for peanuts and the above figure is the prevailing one there. The power of the Virginia port in the industry is due to the fact that the American Peanut Corporation—the greatest single factor in peanutdom on this side of the water—is located there. In many cases the prices made to farmers in other parts of the South is with the freight to Norfolk taken off.

In a few localities the farmers are getting only 60 cents a bushel this year, but in sections of Texas they are reveling in a price of \$1.25. At 60 cents a planter can make more from an average crop of peanuts than from a yield of 12-cent cotton. In 1915, the price of peanuts was moping around 30 cents a bushel. The entrance of cotton mill men into the trade was celebrated by a jump of 25 cents a bushel in three weeks.

The figures speak for themselves—but they do not voice the curious and dramatic tale that lies behind them. The boll weevil drove the farmer into the arms of the benevolent peanut. He would have found no comfort there had it not been that the peanut was a rescuer with great and diverse virtues.

The immortal youth who stood on the burning deck consuming peanuts in peck quantities might have been a foolish martyr to his strange passion, but he certainly gave due recognition to a little-known but valuable food. Ten cents worth of peanuts have in them as much nutriment as 20 cents worth of porterhouse steak, 36 cents worth of milk or 13 cents worth of potatoes. So rich are these nuts—which are really not nuts at all—that a dime's worth of them contains 120 grams of protein, more than is considered adequate for a day's consumption. Peanuts have a greater food value than wheat. Their 33 to 37 per cent of protein puts them up into the distinguished class with the lofty egg.

Experiments are being made by the government to discover the best uses for the peanut and to make it more popular with American kitchens. Dr. A. J. Le Clerc, of the Chemistry Bureau of the Department of Agriculture, recently began researches that are expected to produce a bread from peanut meal which in its value for food and in its tastiness will be the equal of any wheat bread. And the peanut bread is cheaper.

One of the few tions for mercy that ing Angel can write credit of the boll weevil helped popularize the Year by year the devasta Cotton's great enemy have taken in more and more of the fertile crown lands. Nothing could be found to stop



the advance and it is like comedy relief to see the peanut enter the trenches in many parts of the South to start the counter attack. For a long time economists had thundered forth denunciations against the folly of



the single crop, but their arguments fell upon deaf ears as long as there was money in cotton. When these arguments were backed up by the deadly fact that the boll weevil was pulling down the cotton profits until it was a matter of time when there would be a deficit in the farmers began to take heed. Many of them planted peanuts in 1914.



This presented a crisis to the owners of cottonseed mills. In sections of Texas there were not enough seeds for the plants to run on.

The mill men took cognizance of the fact that the farmers were planting peanuts and asked them about their market.

"We market 'em on the hoof," was the answer.

Which being translated meant that they turned the nut fields letting vines and root for sold the peanuts in lard and pigs' knuckles. The farmers quoted literature culture which pointed out that few if any crops of the Department of Agriculture were so valuable as a stock food. A 40-bushel crop of Spanish peanuts will produce 400 to 500 pounds of pork to the acre, and if the hay is harvested before the bars are let down for the hogs, it will almost pay for the growing of the crop. In addition to the direct profits, the peanuts leave the land better off than when they were planted. For like many of their cousins in the bean family, they gather and deposit nitrogen in the soil. All of which was mighty nice for the farmer—but it didn't help the mill men face their famine of cotton seed.

"Well," said the farmers, "why don't you crush our peanuts?"

The mill men laughed at first. Then they began to



investigate and the things they discovered about the peanut took the smiles from their faces. In 1914 the United States imported 44,549,789 pounds of nuts and 1,332,108 gallons of peanut oil from Marseille, Delft, Hamburg and other ports. The nuts brought \$1,899,237, and the oil, which was valued at \$915,939, went mostly into the manufacture of butterine and other lard substitutes.



trade deadlier than demand for it was hungry as a By slight machinery that tonseed plants nut oil plants as they peanut oil over the old product was emphasized by the willingness of the trade to pay 67 cents for a gallon of peanut oil when they would pay but 65 cents for the same measure of cottonseed oil. On the strength of these things the mill men experimented cautiously with peanuts.

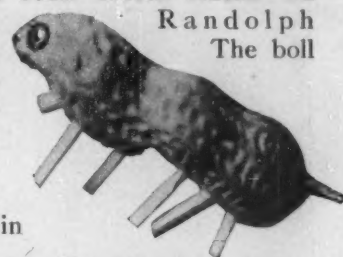
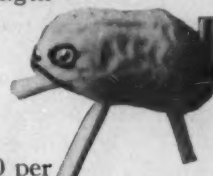
The results were so successful that the acreage in Texas increased more than 1,000 per cent from 1915 to 1916. Fully three-quarters of the vast county of Comanche were taken from cotton and given over to the goober. History was repeating itself in Georgia, Alabama, Louisiana and in the other cotton states. In Georgia, Calhoun and counties had been cotton fields. weevil regarded these fair acres and acted as if they had been planted for his especial benefit.

"Peanuts," murmured the Calhoun and Randolph men in their sorrow.

They are shouting the word now at the top of their voices. Their lands are turned into peanut plantations. They have built mills and warehouses at Coleman, Arlington and Edison to take care of the yield from 15,000 acres. Cotton oil mills throughout the South are making the necessary changes in their machinery and are preaching the renaissance of the goober to the planters about them.

At Houston, Tex., three large mills have taken up the manufacture of peanut oil and cake. They with others about the state have guaranteed a ready market for the entire Texas crop and the outlook for next year is for a far greater acreage than this year.

The Fidelity Cotton Oil Company of Houston, under the management of James D. Dawson, was one of the most passionate partisans of the peanut. This mill crushed 6,000 tons last season and instituted researches that resulted in greatly improved methods of manufacture. D. S. Cage was largely instrumental in inducing the mill to take up the manufacture of peanut products on a big scale and he also enlisted the support of the newspapers in getting to the farmers and mill men throughout



all parts of the state the benign message of the goober.

So surprising has been the success of the experiments that the planters have begun to look for the dark side of the silver lining. The price of peanut products has gone up with all its companion foodstuffs—will it come crashing down at the end of the war? How much danger is there from over-production?

Mr. Cage says that there is little danger of surfeiting the world with peanut oil and cake because the food value is such that there is a universal market for it. He points out another virtue contained in the blond and corrugated shell of our hero.

"The South," he declares, "abounds in sandy soil that will produce little cotton or grain. If the peanut could submit specifications it would ask for just such soil. Vast tracts where pine forests have stood may be made useful and valuable by planting them with peanuts.

"The cottonseed mills have a capacity far beyond the available supply of their raw material, and have therefore lain with cold furnaces for a large part of the year. They will naturally welcome a new industry that will extend the yearly period of operation and at the

same time extend the figures on the credit side of the ledger."

He also points out that while many of the products of the cotton states—such as potatoes, cabbages, onions and fruits—are of a perishable character, the cake and oil from peanuts scorns all climatic idiosyncrasies and bears with equanimity export trips to the most distant markets.

At the present prices there is about \$10 more per acre in peanuts than in cotton. On the basis of one-third of

a cotton bale to the acre, the lint and seed will yield about \$22. An average yield of peanuts is 40 bushels, worth 60 cents a bushel and two-thirds of a ton of hay, worth about \$8—or \$32 to the acre. The cost of growing is about the same as cotton, coming to \$14 or \$15 an acre.

"Peanuts," says a government bulletin, "should be dug when the vines have the greatest number of mature pods."

But it adds in an offhand way that the farmer must use his own judgment as to just when this auspicious time arrives. The nuts are dug

with a turn-plow or with an intelligent machine called a potato digger, which can uncover from 8 to 10 acres in a



The colored gentleman with the derby is stacking these peanut vines in the most scientific way.



The fields of cotton and the pickers therein are famous in song and story—but where shall we find a troubadour whose dulcimer can find music in "The Moonlight on the Peanut Vines?" The darkies are picking peanuts by hand, a laborious process that has been largely supplanted by a power picker that can turn out 400 bushels a day.

day. After shaking the vines free of earth and allowing them to lie in the sun a few hours, workmen stack the peanuts about an upright pole seven or eight feet long, taking care to keep the nuts near the center and the vines outside to shed the water. It is best to let the vines cure from four to six weeks on these stacks. In some places peanuts are still picked laboriously by hand, but where the acreage is large it is done with a thrasher.

The oil from the peanut is so rich and appetizing that it is a good salad oil as it runs from the press. In taste it is just as fine and in food value it is even better than olive oil. Oleomargarine and butterine made from peanuts have a splendid nutty flavor.

Many "ifs" and "buts" and cautions are being sent out with the publicity about the peanut. The farmer is

told that of the five varieties—Virginia, African, Valencia, Tennessee Red and Spanish—only the small and prolific Spaniard should be grown for oil. The mill men are warned that there is a danger of producing too much low grade oil which must be sold at a sacrifice for soap fat and manufacturing processes.

But down in the cotton country they say that we are soon to see the rise of peanut barons, to take their place in our aristocracy of production beside the wheat, corn and prune kings. And we may prepare ourselves for the listing of the goober on stock exchanges where it will thrill us with corners, panics and clashes.

Verily, the peanut, butt of a century's jokes, has come into its own.

The Mother of Modern Ceramics

THE potter and his clay have left their mark, and show no weariness in good works. The woman in the picture practices to-day high arts of symmetry and skill, unconscious that other women worked in the self-same way so long ago that their broken water jars lie mingled in the lowest strata over which archaeologists

her piece of earthenware is the precursor of the translucent porcelains of China which made our Middle Ages gasp with astonishment and joy and set the alchemist at work to discover the secret of a thing quite as precious as gold, the Sevres vases which royalty delighted to fashion, and a modern industry so important that an

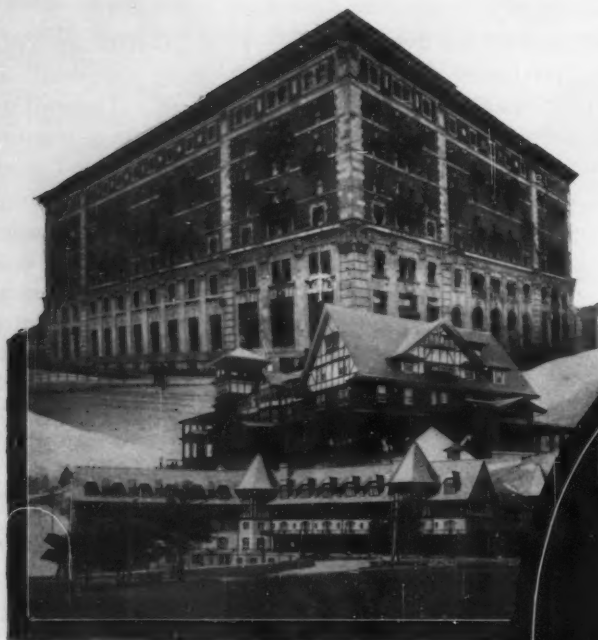


puzzle with distracting learning. She is unaware that she really belongs before the age of mythology, when all the world agreed so beneficent a tool as the potter's wheel—to which she has not attained—could only come directly from heaven, and she would scoff at the idea that

American university in December opened a three-story building devoted to its technique. In a modern china shop the woman in the picture would be so frightened she would cause about as much havoc as the traditional bull, and yet she has made the china shop possible.

The Biggest Housekeeping Job

By MAX ENOS



most important of the Canadian Pacific chain. Hutchinson knew more about eating good dinners than about preparing them, but he had a shrewd idea of the value of efficiency methods as applied to a stewardship. He went over the scope of his work thoroughly, found the weak places, bolstered them; found the leaks, stopped them; found the opportunities

IF you were to be confronted for one day with the task of managing even a small hotel you probably would emerge from the ordeal with a wholesome respect for the size of the job. For the ability to keep the hidden wheels moving ceaselessly and efficiently beneath an unruffled surface is a gift that requires a special genius. The management of any large hotel, however, demands from its proprietor special efficiency in a vastly more difficult economic problem; and the management of a chain of twenty hotels, scattered from Nova Scotia to British Columbia and comprising some of the most important hostelries on the continent, constitutes not only the greatest housekeeping job in the world, but one of its big commercial enterprises.

Ten years ago hard times made Frank Losh Hutchinson a kitchen steward in the Chateau Frontenac at Quebec. Today he is manager of that and the nineteen other hotels of the Canadian Pacific system. Here is a picture of Mr. Hutchinson and some of his charges.



During the past ten years the work of hotel management has become a part of Big Business. The Boniface of the yesterdays has given way to the business man of to-day. And with the new order has come Frank Losh Hutchinson, who after a period of less than ten years in the hotel business takes charge of the twenty hotels of the chain owned and operated by the Canadian Pacific Railway Company.

Ten years ago Mr. Hutchinson was a member of the Montreal Grain Exchange. The panic of 1907 caught him, as it caught thousands of other men already financially successful. So effectively did it crush all immediate business opportunities that there were but few avenues of employment open even to men of unusual ability. The young broker, instead of waiting passively for the coming of better conditions, turned to the nearest available job.

The job happened to be that of kitchen steward at the Chateau Frontenac in Quebec, one of the largest and

for enlargement of service, used them; found the means for bettering the service, and put them into effect. Within a short time the hotel department of the railway recognized his ability by promoting him to the assistant managership of the Frontenac. In a year he was managing the Chateau, the great gray building which sentinel the harbor of Canada and meets the traveler as the foreground of the splendid picture of Quebec. In another year Hutchinson was assistant to Hayter Reed, the general manager of the hotel department. Later he became the superintendent of the Canadian Pacific hotels in Alberta. In 1913 he resigned to manage a large hotel outside the system, but returned in a short time to take charge of all the hotels of the railway.

The Canadian Pacific hotels represent an invested capital of \$25,000,000. The twenty, known to globe trotters as the finest system in the world, extend over a line from the Atlantic to the Pacific, and include hotels famous for their beauty of structure, their

excellence of service, their fine cuisine and their general dependability.

The twenty hotels of the system are the Chateau Frontenac of Quebec, the Place Viger of Montreal, the Algonquin and the Inn at St. Andrews, New Brunswick, the McAdam Hotel at the New Brunswick Junction of the same name, the Caledonia Springs Hotel of Ontario, the Royal Alexandra of Winnipeg, the Palliser of Calgary, the Banff, the Chateau at Lake Louise, the Mount Stephen House at Field, the Emerald Lake Chalet, the Glacier House, the Hotel Revelstoke, the Kootenay at Balfour, British Columbia, the Sicamous, the Incola at Penticton, the Hotel Vancouver, the Cameron Lake Chalet, and the Empress Hotel at Victoria.

It is the mountain hotels of the railway that constitute one of the most difficult of the problems that task Mr. Hutchinson's work of management. The disadvantage of wilderness travel has been the wretchedness of hotel service on some of the world's beauty spots. Men and women accustomed to combining magnificence of place with miserable accommodations have been delighted to discover that one railway system has provided for their comfort hotels equal to any in good service.

Because of its coast to coast tourist traffic the Canadian Pacific decided to inaugurate this hotel system in order that its patrons might be insured adequate accommodations. The popularity of the railway with British globe-trotters and big game hunters brought into Western Canada a type of traveler accustomed to the best of European hotel service and demanding the same wherever he traveled. The unadaptability of the English tourist was the immediate incentive of the

service, arise every day in every hostelry of any size. Multiply the troubles of one big hotel by twenty, and you have the job that Frank Losh Hutchinson has undertaken. Imagine the help he'll have to supervise, the food he'll have to buy, the machinery he'll have to keep moving, and you'll admit that he has the biggest house-keeping job in the world.

Kinematics in Chinese Customs

THE Chinese always excite our admiration. Only a sturdy, industrious, wealthy, and indomitable people could defy most of the precepts of economics and remain any semblance of a nation, even with occasional conflagrations within its periphery. Until 1895 Chinese superintendents of customs paid their own staffs and the expenses of their offices. The superintendent at Canton had the richest post and at times managed to pay to the government as much as ten per cent of his generous collections. Sitting at the seat of customs was a highly profitable business.

The Boxer difficulties in 1900 began more than one revolution in China. To pay indemnities to the countries that asserted injury, China had to pledge the maritime customs, and allow a foreigner to take charge of the more important districts. The foreign commissioners, however, have in some cases found that possession by a Chinese official is certainly nine points of the Chinese law. One of them did not gain control over the whole of his bailiwick until 1914.

Between jurisdictions of the foreign commissioners, native customs officials still hold sway. They collect from goods carried mostly on junks—peanuts, duck feathers, dried fish, salted plums, sugar, and the like. The native method of bringing boats to the custom house is to place barriers across all streams in such a way as to force everything that navigates within reach of the collectors.

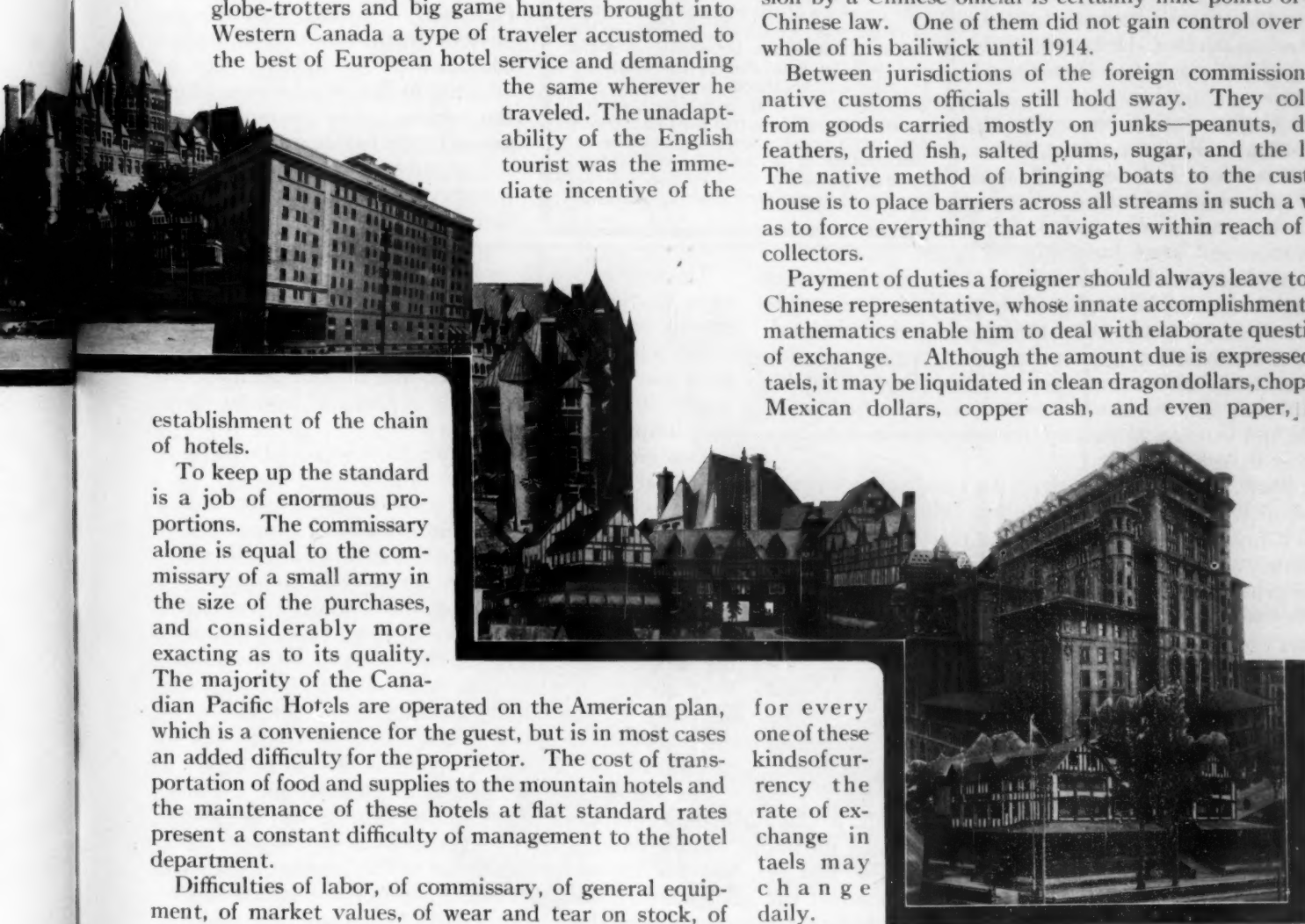
Payment of duties a foreigner should always leave to his Chinese representative, whose innate accomplishments in mathematics enable him to deal with elaborate questions of exchange. Although the amount due is expressed in taels, it may be liquidated in clean dragon dollars, chopped Mexican dollars, copper cash, and even paper, and

establishment of the chain of hotels.

To keep up the standard is a job of enormous proportions. The commissary alone is equal to the commissary of a small army in the size of the purchases, and considerably more exacting as to its quality. The majority of the Canadian Pacific Hotels are operated on the American plan, which is a convenience for the guest, but is in most cases an added difficulty for the proprietor. The cost of transportation of food and supplies to the mountain hotels and the maintenance of these hotels at flat standard rates present a constant difficulty of management to the hotel department.

Difficulties of labor, of commissary, of general equipment, of market values, of wear and tear on stock, of

for every one of these kinds of currency the rate of exchange in taels may change daily.



Square Pegs for Square Holes

In Which is Recounted the Sad Tale of the City that Built a Vocational Training School and Then Had No Jobs for Its Graduates

By ALVIN E. DODD, Secretary of the National Society
for the Promotion of Industrial Education

ONE day an immigrant from Arabia passed through Uncle Sam's sieve at Ellis Island and began a wearisome search for employment in New York as an expert camel driver.

At first he was puzzled to know why the big town was amused, but by degrees he was able to piece together the picture as the New Yorkers saw it: Camels transporting freight in Broadway; the fleet-footed dromedary carrying passengers in Fifth Avenue!

When at last he did understand, he went back to the Battery and gazed out at the ship which had brought him to America and which was carrying back many of his late fellow-passengers whom the United States had rejected. He had thought that his lot was better than theirs—but was it?

At the same time, in a city of the Middle West, a young man, American born and bred, had just seen the word "failure" written after his name. He had a fair education and some knowledge of two or three trades, but none of them was important enough in his city to employ many persons. Thrust into a position of importance requiring semi-technical knowledge of which he was ignorant but which a slightly better acquaintance with a few pages of his despised arithmetic would have enabled him to master quickly, he had failed.

He had listened to that advice which we used to hear oftener than we do now:

"'Bluff' your way through; it isn't so much what you know as what you can make others believe you know."

In many respects, the cases of the two young men were strikingly alike. Neither was a shirk, both were capable of intelligent labor, both trained workers, yet both, failures.

They were failures because they had been taught to do things which nobody in their immediate vicinity wanted done. There was no market for their services.

Their experience was typical of many of the more than a million young men and young women who, according to President Wilson's commission on vocational education, become wage-earners each year in the United States. Of the small number of these million and more who receive any specific industrial training at all, a large percentage is being trained for positions which do not exist. Perhaps we have not done anything so bad as train an American boy to operate an electric street car and then send him to a country where everybody rides camels, but we have done things almost as bad.

This is not a plea for vocational education. That is hardly needed in this day when persons who used to quote approvingly what Horace Greeley is supposed to have said about the value of sleeping on piles of old newspapers and eating printer's ink as

a preliminary training for newspaper work are conducting schools of journalism. They do not, however, advise young men to study the art of newspaper writing if they are to spend their lives in Center Crossing, where there is one weekly newspaper.

All agree that common sense dictates that we should train our future workers, but we waited for the man of uncommon sense to point the fact out. In like manner, the obvious truth that this utilitarian education, to be effective, must be adapted to the communities where the workers are to live escaped our notice in the beginning.

The same vocational courses will not serve in a furniture-manufacturing city like Grand Rapids and a textile city like Fall River.

The only means by which a community can determine what kind of technical training will meet its needs is a careful survey, which will disclose also the extent to which schools, private agencies and apprenticeship systems are supplying such training or can be made to supply it. Any other course is likely to lead to waste and disappointment.

Two cities which attempted to solve the problem of industrial education are cases in point.

The school board of the city of—no matter what's its name—after much public discussion, despatched a committee to several other cities to look into this vocational education which everyone was talking about.

In one of the places visited, the committee was entertained in a girls' trade school devoted to instruction in the needle trades. The luncheon served by the pupils, their air of efficiency, the hum of the electric power machines, and the quality and quantity of the product of the school shops sent the committee back home full of enthusiasm for just such a school in their own city.

The school was established at considerable expense, modern equipment provided and capable teachers hired.

Three months after the graduation of the first class, however, the authorities awoke to the fact that there were not positions enough in their city in the needle trades to absorb more than a small part of the class, and that the nearest city which had any needle industries would have

STOP! LOOK! LISTEN! came to us as a possible heading for this discussion of vocational training in which the author warns against haphazard application of a perfectly good principle of education. There have been many sins, unwitting of course, committed by communities in the name of vocational training, because zealous but inexperienced school boards have stumbled into pitfalls such as are pointed out here by Mr. Dodd.

The Smith-Hughes bill which proposes that the Federal Government shall assist vocational education in the several states will doubtless become law early in January. The problems of the community will then in larger way become the problems of the nation. One of the big problems of the law will be synchronism of vocational training and vocational opportunity in a national way. If it is achieved, federal expenditure will be a real blessing, earning posterity's praise. If through unwise administration it is not achieved, federal appropriations for this purpose will become malodorous pork barrels.—Editor.

its market for workers glutted if it attempted to absorb the graduates of more than two classes.

Richmond, Va., was also on the point of making a costly experiment, but, inspired by the National Society for the Promotion of Industrial Education, decided to survey its industries and schools in order to find out what kind of education was needed to fit pupils for the industries of the city and how far the schools were supplying it. The investigation covered the printing, building and metal trades and the tobacco industry. One hundred and eight distinct occupations, at which more than 17,000 workers were engaged, were studied.

The inquiry disclosed not only what ought to be done, but also how it ought to be done. It showed just what the duties of a worker in each occupation were, what degree of general education and technical knowledge and skill were required, where the worker learned the "how" of his work, and whether he could learn it better in a technical school or as an apprentice in a shop.

The survey cost \$10,000, but saved the city from inaugurating a plan unsuited to its needs—one of the things contemplated had been the erection of a trades school at a cost of \$225,000—and as a result Richmond now has more than fifty schools and classes which are meeting her needs, and she has arranged a programme covering a period of twenty-five years which she believes, with good reason, is right for Richmond.

THE movement for vocational education has given birth to great demand for such a reorganization of our schools as will enable them to provide the specific training needed by future workers. In this movement, the National Society for the Promotion of Industrial Education and chambers of commerce have been active agencies, and the largest vote ever cast by the Chamber of Commerce of the United States was overwhelmingly in favor of the Smith-Hughes bill, which is to aid the states in vocational training.

A notable example of private interest in the movement was the bequest of \$5,000,000 by William Hood Dunwoody, wealthy flour manufacturer, to provide free industrial instruction to the youth of Minnesota, while the state of Indiana, which is making a state-wide survey covering many different types of communities, in order to undertake effectively the work of vocational education, suggests what all the states might do in anticipation of

the passage of the Smith-Hughes bill. Vocational education suited to the needs of our communities is more important than may appear at first blush. The welfare of the individual worker is not alone at stake; the welfare of the whole country is at stake. Adequate technical training is necessary for our defence in war and our prosperity in peace. It is the nation's business to see to it that the workers of the nation shall be trained to labor intelligently, for that is what vocational training means, and if the nation shirks that duty, it and not the individual worker will be the greater loser.

In this connection the most reassuring fact is that a keener appreciation of the importance of intelligent vocational education is being gained, especially by the commercial world, and that there is an insistent demand that our schools shall reorganize in such a way as to afford to the future workers of the land that specific training which will fit them for the roles which they will be called upon to play.

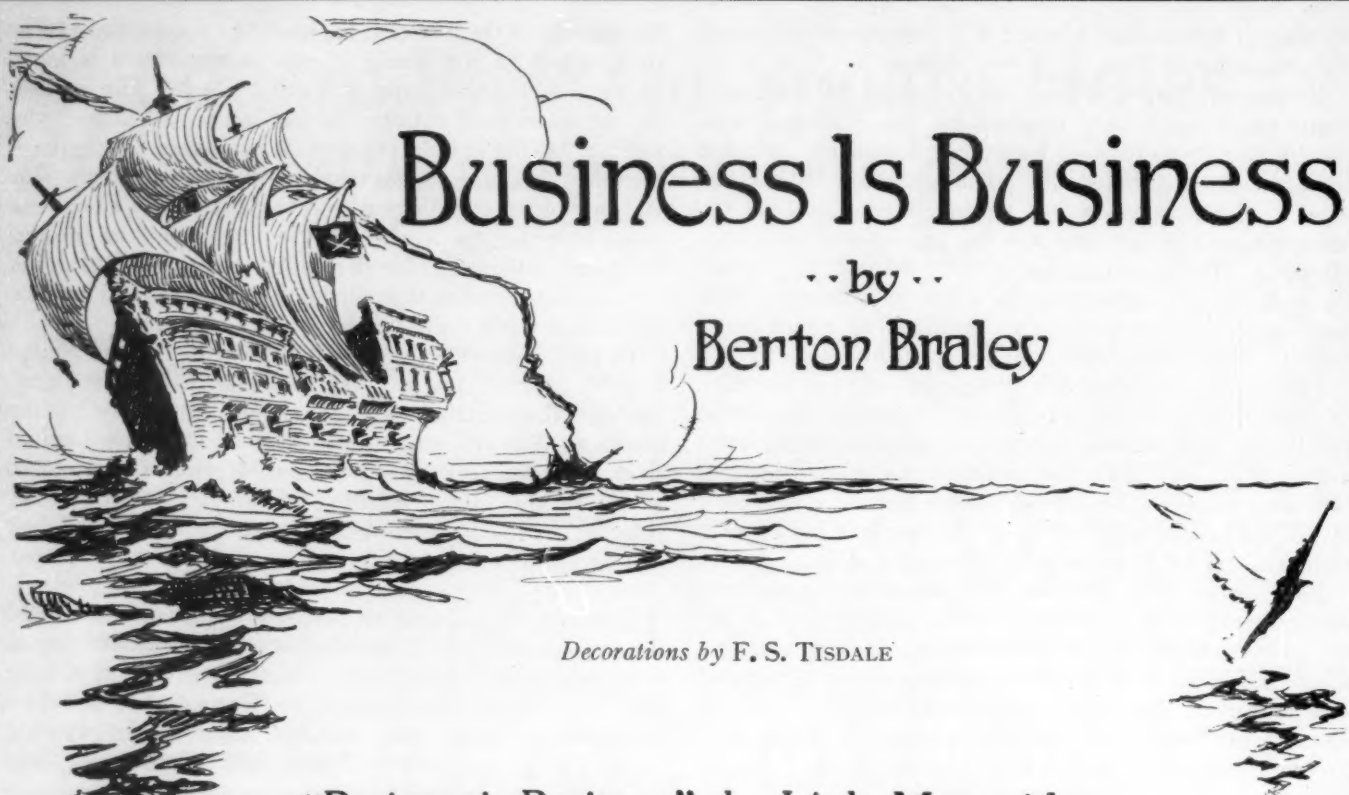
IT would be as futile to prophesy what the industrial situation will be after the war as it would be to close our eyes to conditions which may very easily be the outcome of the struggle in Europe. It may be assumed, however, that the first care of the warring nations, after peace is established, will be to rebuild their ruined towns and begin to accumulate wealth to discharge the mountainous debt with which the war is burdening them. They will bend every energy to the growing of abundant crops to the end that they will not only have enough to feed their own people but also a surplus with which to discharge some of their obligations. Europe will need every available man, and it seems unreasonable to suppose that she will permit wholesale emigration.

Already our labor supply is unequal to the demand, and we have, moreover, seen the fulfilment of a prophecy made two years ago, that the war would result in emigration from the United States to Europe. Only a day or two ago the newspapers reported that a company of workers, to be followed by others, had arrived in Norway from the United States.

Whether we play the peaceful role of supplying lumber, hardware and other commodities to a prostrate Europe rebuilding her house after a storm or are forced to contend against a rapacious and efficient Europe in a fierce war for world trade, we shall probably need every available worker, trained to the uttermost.



A graduate of the camel-driving class on Broadway



Business Is Business

..by..

Berton Braley

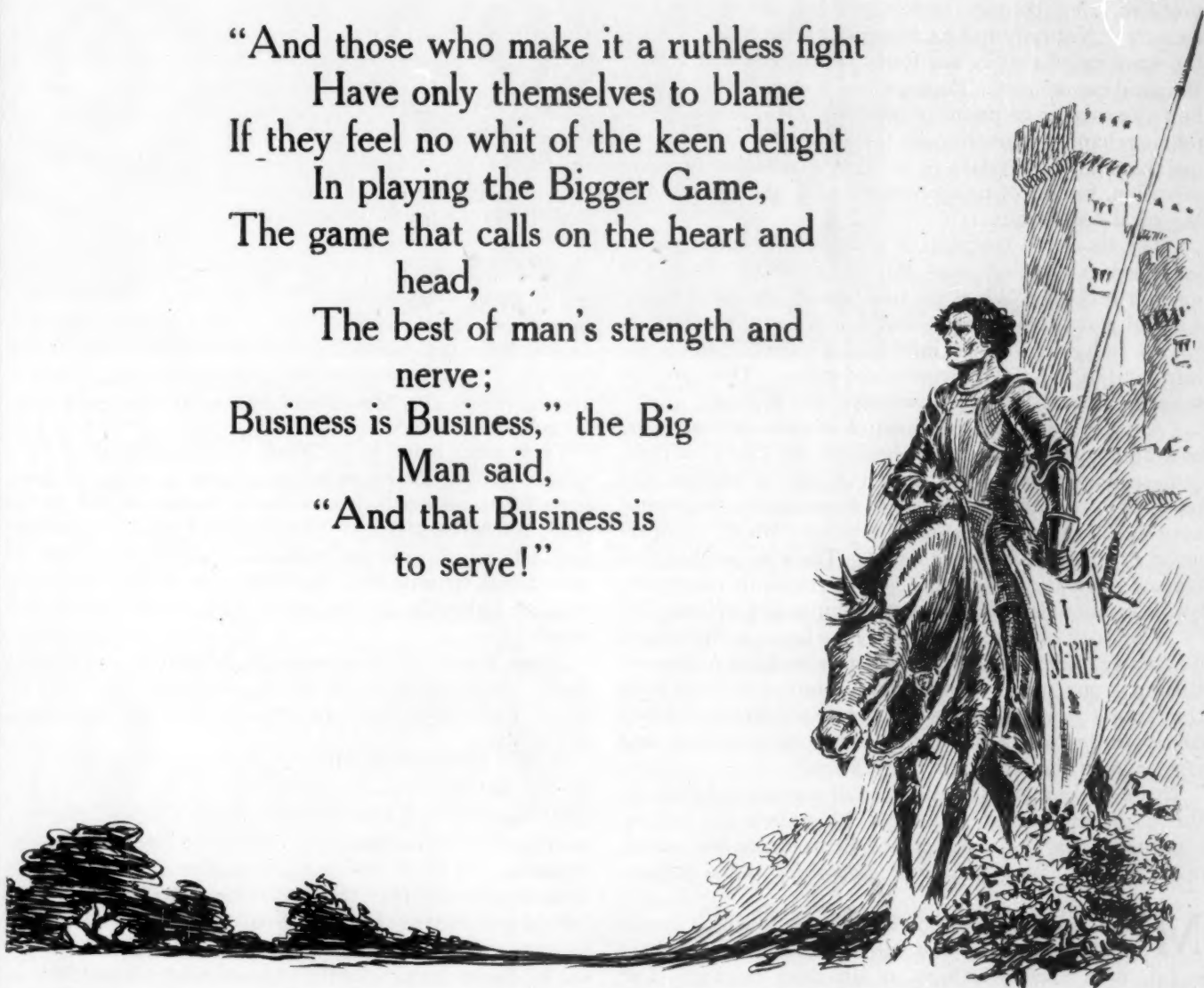
Decorations by F. S. TISDALE

"Business is Business," the Little Man said,
"A battle where 'everything goes',
Where the only gospel is 'get ahead',
And never spare friends or foes,
'Slay or be slain,' is the slogan cold,
You must struggle and slash and tear,
For Business is Business, a fight for gold,
Where all that you do is fair!"

"Business is Business," the Big Man said,
"A battle to make of earth
A place to yield us more wine and bread
More pleasure and joy and mirth;
There are still some bandits and buccaneers
Who are jungle-bred beasts of trade,
But their number dwindles with passing years
And dead is the code they made!"

"Business is Business," the Big Man said,
 "But it's something that's more, far more;
For it makes sweet gardens of deserts dead,
 And cities it built now roar
Where once the deer and the gray wolf ran
 From the pioneer's swift advance;
Business is Magic that toils for man
 Business is True Romance.

"And those who make it a ruthless fight
 Have only themselves to blame
If they feel no whit of the keen delight
 In playing the Bigger Game,
The game that calls on the heart and
 head,
 The best of man's strength and
 nerve;
Business is Business," the Big
 Man said,
 "And that Business is
 to serve!"



As the Store is Bent So the Town's Inclined

Country Merchant, to Whose Store City People Have Beaten a Path

And the Town is the
Back-Bone of the
Nation, Believes this

By GEORGE FARLEY

HERE is the story of a country merchant who, in a town of 300 people, is selling \$75,000 worth of goods a year, \$250 worth for each man, woman and child in the village, and he's not doing it by luck.

Not only has he induced country people to trade at home, but he has captured the patronage of the city man as well. He is doing this amazing thing because he set out to make a certain goal. He studied merchandize, market conditions, people; he found out why certain concerns were selling to certain persons and he adopted the same methods.

His career suggests that it is the country merchant's own fault if the mail order house drives him out of business; also that you might as well not have attractive goods if you don't let people know you have them. He lets them know by spending \$2500 a year in advertising.

He is E. B. Moon, of Lakeville, Indiana, and his success points the way, perhaps, to the solution of a problem, not of the rural merchant alone, but of the whole country. Not only has he found out what's wrong with the rural merchant; he has found out what's wrong with the rural community. Perhaps he can save both, because he's an expert in community building as well as a successful merchant. Economically speaking, no one but the merchant and his relatives is interested in his business salvation, but all of us are interested in the salvation of the rural community.

"Ten thousand towns, it is said, lost population during the last decade," says Mr. Moon. "Of these, 639 were in Indiana. When the business of a town declines, a social and intellectual paresis follows, and civilization loses. Individuality and initiative are developed on the farm and in the smaller towns and cities. They are the training ground for our future men and women.

"And so, when the business of a town declines, the community declines with it, because the loss in a town radiates in all directions. It is the part of wisdom and patriotism to build up our small towns and villages and save them from the big aggressive trade centers. Cooperation is community uplift spirit. The every-fellow-for-himself spirit deadens towns. Cooperation is constructive, selfishness is destructive, of community welfare.

"The duty of farmers to patronize home merchants is no greater than the duty of the home merchant to deserve their patronage. A merchant is unfortunate who feels that people have to trade with him. Such self-sufficiency drives trade to the big cities, and both merchant and farmer lose; and the community loses."

If the decline of business in small communities means the loss to civilization which Mr. Moon believes it does, it probably reacts in a still greater degree upon the wealth of the nation. We certainly are poorer for such a decline.

MOOON had a vision of a village store to which people would come from the surrounding cities by automobile and electric railway to do their buying. The

thought that country people might use automobiles and electric lines to go to the nearby cities didn't disturb him.

But it is doubtful that he told all this to his father the day that, fresh from college, he proposed to buy the father's store, because he wanted the store. What he probably said to him was simply that he'd like to buy the business. The father was willing, because he had got a good deal of hard work but not much profit out of the store.

To find out what was wrong with the prevailing methods of selling merchandize in rural districts, Moon began by finding out what would be right. Then he started in to make a store after the pattern of his dream, while the rest of the country merchants laughed behind their hands and waited for the crash.

Moon's dream started with Little Mary and a catalogue. Little Mary had certain wants and pretty definite notions as to what would satisfy them. Moon set himself to find out just what it was that Mary wanted. He knew that the mail order houses were supplying the needs of many Little Marys among the people to whom he was going to make his appeal, and therefore they must know what would satisfy them. Hence that big stack of mail order catalogues with which he surrounded himself from the four corners of the earth. Somewhere in the fastnesses of their pages they held a secret—they knew what would satisfy Mary's heart.

MOOON'S country store in Lakeville is ten miles from South Bend, Indiana. It is near a number of other important manufacturing cities. Five years ago that was as much as you could say about the place, except, of course, those things you say about country towns in general when you don't have to be careful about your language.

Then along came E. B. Moon and bought his father's store. To-day Moon is a "merchant prince;" jobbers, manufacturers and salesmen have beaten a path to his door, and Moon is realizing his dream of seeing city people stop off at Lakeville and of farmers' wives on their way from South Bend, where they sold their butter and eggs, stop at Lakeville to buy their sugar and coffee and starch.

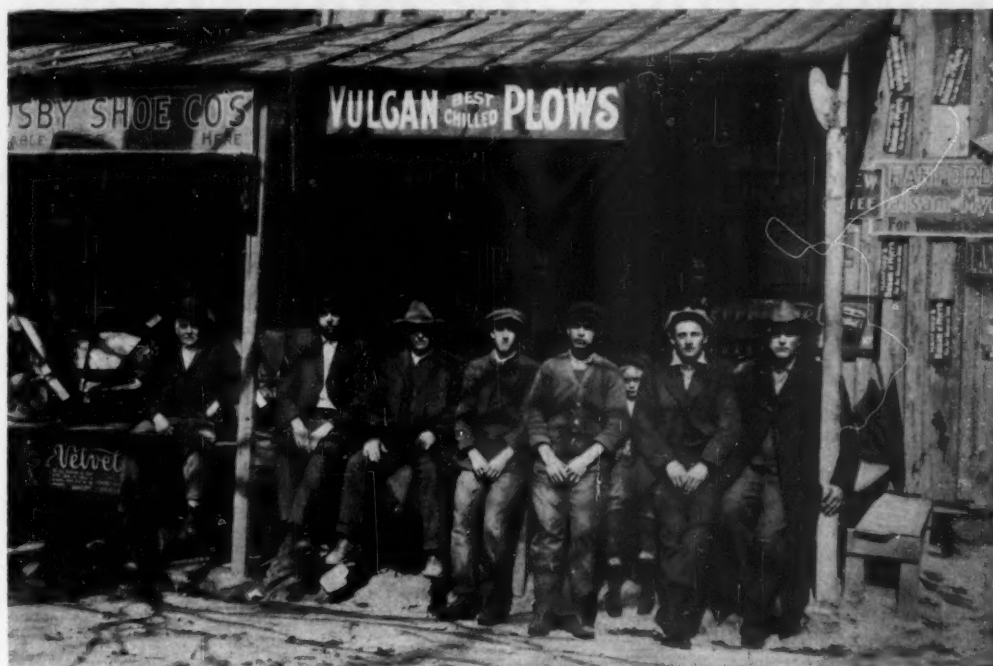
Moon knows all his customers intimately, he studies them. Not only does he know what they like, but he knows when their taste changes and they like something else better.

He has reversed the theory of salesmanship that anyone can sell a customer what he wants, but that it takes a salesman to sell him what he doesn't want. He is a merchant with imagination. He sees the romantic in business, and of all the dramatic stories of business none is more dramatic than the one he has written.

You may have a picture in your mind of the successful business man, and it is safe to say that you pity him as a slave. Moon lays it down as a truth that competency in

business and getting fun out of it—seeing the romance in it—usually go hand in hand. It is your slipshod, incompetent, unimaginative “storekeeper” who is the slave and gets no fun out of his business, and who is, in large measure, the failure.

More than one per cent of the concerns doing business in the United States in 1915 failed, the exact number of failures being 22,156. Taking a “close-up” view of Indiana, we find that 542 of those failures were in that state. There is no telling, of course, how many concerns barely escaped failure, how many just “made a living” for their owners, and how many returned a handsome profit, but it isn’t hard to find the extraordinary successes, simply because they are extraordinary. They are the ones whose business yields them fun as well as profits.



The country store is the pivot on which largely turns the virility of small communities, and these communities are the pivot on which the country turns. E. B. Moon, successful country merchant and expert in community building, declares that, when trade in a town declines, the nation suffers. And he is not alone in seeing a relationship between the country store and national life. L. H. Bailey, for instance, in his Country Life Movement in the United States, says that “the country store ought to be a factor in rural betterment,” but confesses “how to make it so, I do not know.” The story of this Indiana merchant suggests that in finding out how to sell more goods he may have found out how to make his store a prop for the community to lean on. It is perhaps unnecessary to say that the above is not a picture of the Moon store; it is offered as a type of store which could not be expected to build up a community.

“It didn’t take me long to find out why the mail order houses were selling goods to so many people,” said Mr. Moon, telling how he started his romantic business career. “It was because the mail order houses were giving the people what they wanted when they wanted it. And they were giving it to them in the size of packages that the people wanted. Most merchants and manufacturers were trying to make them take what the merchants and manufacturers wanted to sell.”

HAVING found out what Little Mary wanted and why the mail order house was selling it to her, Moon was ready to open his campaign.

“You know that when Little Mary starts to school in the fall she needs a new sweater,” said Moon.

“Well, I sell that sweater to her now, but I don’t do it by appealing to her mother. Since she is to wear the sweater, I write to Mary herself about it. I tell her all about the red sweaters we have just got in, that we have her size—I have made it my business to find out what her size is—and I invite her to come in and try on the one that I picked out especially for her.

“She comes as soon as she can make her parents bring her. When she comes, I pay all possible attention to her, not to her parents.

“The other day a man came in with his grandson, to whom I had written about something that I thought he would like to have.

“‘I wish you would stop writing to that boy,’ the old man said, ‘because he doesn’t give me any rest until I bring him in.’

“I keep an accurate list of every family in my whole trade territory, with the names and ages of all of the children. The new babies are always listed, so I know the ages every year when I begin to advertise.

“But the children are not the only ones to whom I appeal. Every fall I make it a point to solicit all the farmers for flour, selling a winter’s supply. To one man I sold 1,500 pounds, and 500 pound orders are not rare.

“Here’s another example—starch. Manufacturers are still putting it up in pound packages. But the mail order people found that the consumers would rather have it in three-pound packages. Now I knew that the mail order catalogues didn’t feature an article until there was a nation-wide demand for it, so I bought starch in bulk, had my own cartons made, and did a big business.

While the jobbers slept, they lost more than a million dollars in starch sales.

“The coffee trade has changed too, but most merchants don’t know it. Farmers are buying it in three- and five-pound packages. I learned that important fact from the mail order houses, and in the last eighteen months have trebled my coffee sales by changing the size of the package.

“Farmers are buying crackers in ten-pound cartons from mail order houses—and E. B. Moon. I have them put up especially. They open crisp and clean, there is no waste, we handle them quickly, and sell a great many of them.”

MOOON lost no time bemoaning the fact that when automobiles in the country became as plentiful as farmers themselves, country “storekeeping” was revolutionized.

Instead, he was busy writing letters to the thousands of people within a radius of 100 miles of Lakeville who had bought cars. A farmer with a new automobile got the impression that Moon was hanging over the gate waiting for a view of that car. There was a paragraph, for the eye of Mrs. Farmer, about something that Moon had for sale, and usually he got a chance to admire the new machine before the end of the week.

"Let 'em buy machines," says Moon; "the more they buy, the more business I do. According to my calculation, the country retailer's chances to sell are about two

to the five he had before the advent of the automobile, but I make the five sales every time."

His automobile mailing list includes the names of persons in cities of five and ten thousand population, and hundreds of tourists from those towns seek out the big store in the little village to make their purchases.

In this Indiana village of 300 Moon is selling \$75,000 worth of goods a year, \$250 worth for each person in the town. Is any merchant in New York City doing as well? If he is, his sales amount to about one billion three hundred and seventy-five million dollars a year, or more than four million and a half for each business day of the year.

Commerce and the Cap and Gown

University Heads, North, South, East and West, Tell of Special Courses which Acknowledge that Live Business Is as Important as Dead Languages for the Hopeful Industrial Magnate

By PRESIDENT GEORGE E. VINCENT
University of Minnesota



THERE is plenty of room in our national scheme for the little fellow in business. But in competition with the big fellow and his scientific methods, the smaller is apt to be stepped on and have his commercial life extinguished. The University of Minnesota has given particular attention lately to helping the business man of the small town.

To this end we have instituted one of the shortest college courses that I know of. It runs four weeks. It aims to help the country merchant combat the gigantic mail order house of the city. We show the owner of the small store that he can not hold his trade by fervent appeals to "keep the money at home" nor by making his play for trade on a basis of personal acquaintance.

He must have a dollar-and-cents argument. Our course teaches the merchant of the smaller towns how to buy judiciously and how to keep up his stocks so that his customers won't be forced to go somewhere else for what they want. He is shown that it was efficiency in administration that enabled the mail order house to come to his own town and undersell him. He is impressed with the necessity of using the same weapon in fighting back. We help him improve his advertising and accounting methods and to take every advantage of the fact that he is entrenched on the spot while his rival is often hundreds of miles away.

These classes have been so well attended that we are planning semester courses for next year that are to run from four to twelve months. They are to be for the benefit of men who are already in business but who need expert advice. Anyone who is alert and diligent can join the classes without academic qualifications. The new courses are to deal with commercial English, advertising and scientific merchandising. Researches are on foot by which we hope later to tell the small merchant

exactly how to proportion his outlay among advertising, rent and help.

The University of Minnesota offers another type of business training for young men who attend the full four years. The first half of the course, the student is kept busy with economics, English, industrial history, accounting, and foreign languages. After he has mastered these fundamentals the rest of the course is devoted to specializing in banking, transportation, journalism or whatever the student decides he wants to take up. So great is the interest now being shown in Latin-American trade that there are sixteen different classes busy with Spanish.

By PRESIDENT THOMAS D. BOYD
Louisiana State University



WHEN Col. William T. Sherman came to Louisiana in 1859 as the first head of our school, it specialized in the colonel's trade of warfare. Military training is still a feature of the institution, but its principal purpose has undergone a radical change. We pay a great deal more attention to making people live longer and live better than we do to cutting their lives short with gunpowder.

Our special industrial courses are heavily attended. Like many other colleges, we have classes in Spanish for the hopeful young business man who is to make his fortune in South America. There is an especial importance for our state in this, as our seaport is a gateway of trade between the two Americas. What is perhaps of more importance, we have from thirty to forty students from Central and South American countries who have come to us to study the United States and its business methods. Whether these men go back to their homes or stay in this country, they are certain to become an important factor in the development of our trade with the other America.

Since Louisiana is famous for its sugar, it is only proper

that one of our most valuable schools should be the Audubon Sugar Course which was established in 1890. This course is so comprehensive that five years are required to complete it. It covers every phase of sugar production from the chemicals of soils to the manufacture of lump sugar. We have had students from Germany, the Philippines, Hawaii, South America, Mexico, Cuba, China, Japan and even from the distant Mauritius Islands.

It is hard to imagine a better profession for a young man—two of my own sons took the course and are now sugar experts. There is a far greater demand for graduates than the school can supply.

Many of the young farmers of our state are too busy with the practice of applied agriculture to come to the university for training in the higher branches of their work. We lay special stress on our extension courses. The boys can't come to the school, so we try to deliver the knowledge to them. Clubs are organized through which we show the planters of the future how to produce more cotton and fewer boll weevils, and ways in which they can raise more corn per acre or more avoirdupois per pig.



By PRESIDENT PRINCE L. CAMPBELL
University of Oregon

BUSINESS in our state means lumber. There are other great industries but they are overshadowed by the value of the majestic Oregon pine to the development of the state's wealth. Like other manufacturers, the sawmill man loses sleep over the matter of waste.

One of the problems is the disposition of the boards and slabs that are too knotty to be worked into salable lumber. The Industrial Survey Department of the University's School of Commerce has made exhaustive researches into this question.

It is hoped that practically all of this waste may be converted into valuable by-products by first extracting the turpentine and using the residuum for making briquets. Coal is high in the Northwest and the discovery of such a fuel supply in our own state would be a godsend to manufacturers and home owners.

We are also stimulating experiments in the growing of flax which we hope will become one of the state's staple crops. Last year we influenced the commercial clubs to back the farmers and as a result 2,000 acres were planted in flax. The commercial organizations guaranteed a market for every pound raised. The flax produced was of exceptionally fine quality and it is believed that the acreage next year will be vastly increased. After the raw material is assured the work of establishing factories for rope and twine making will be taken up.

Mr. H. B. Miller, former American Consul General at Tokio, is director of the University's Commercial School. The courses are designed with a view to the education of men who can take places in the foreign trade and hold their own with European competitors. Besides teaching such things as banking, international law, languages and

commercial geography, we aim to school the students in the highest forms of salesmanship, self-reliance, diplomacy and organization.



By PRESIDENT GUY POTTER BENTON
University of Vermont

THE late John H. Converse, president of the Baldwin Locomotive Works of Philadelphia, had the idea that the usual college course gave altogether too little attention to business training. In his remarkable career he saw the need of educating men for commercial pursuits as carefully as for engineering or medicine or art.

Mr. Converse was a graduate of our college. When he decided to put his views into effect he chose the University of Vermont. With the Converse endowment a number of buildings were erected and the Department of Commerce and Economics established.

We don't want our students to take up letter copying, bookkeeping or stenography. We train men to give dictation—not to receive it. After a student has been through our intensive four-year commercial course he receives the degree of B.S.C.E. That means "Bachelor of Science in Commerce and Economics."

Besides giving the men the practical fundamentals and laws of commerce, we arrange for lectures by prominent figures in the industrial world. We make every effort to enable students to get actual experience while they are learning their theories. One of our students is now working in the Howard National Bank at Burlington without pay. The City National Bank of New York is to give him a place the minute he quits college. We are also placing graduates as secretaries of Vermont commercial organizations so that they will use their knowledge to develop the business resources of their own state.

MAKING A MAGAZINE

(Concluded from page 6)

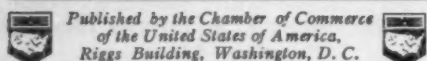
physical requirements; he must maintain an excellent school average in all studies, and must present a certificate from the principal of his school to that effect. He must be "physically strong, mentally awake, and morally straight."

The Curtis plan supplies to a very large number of young boys, in the habit-forming period of their lives, a preliminary training in business values, and a sense of personal responsibility, whose ultimate worth cannot be estimated in dollars and cents.

THIS, then is the story of an American magazine, typical to a greater or lesser degree of the many publications of the country whose purpose is to serve human-kind. And as this purpose is more nearly achieved, it seems that the public responds more readily, and the business side prospers. For always the truth strikes home—men and women will pay and pay well for that which serves them.

THE NATION'S BUSINESS

A MAGAZINE FOR BUSINESS MEN



MERLE THORPE Editor
ROBERT D. HEINL Associate Editor

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THE NATION'S BUSINESS is the monthly publication of the Chamber of Commerce of the United States of America and, as such, carries authoritative notices and articles in regard to the activities of the Chamber, its Board of Directors and Committees. In all other respects it is a magazine for business men and the Chamber is not responsible for the contents of the articles or for the opinions to which expression is given.

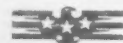
WASHINGTON, JANUARY, 1917

PEACE will not have the suddenness of war. To be sure, peace may come upon a business world which is altogether different from the world of 1914, but for the effects of peace upon international business affairs which are intimately bound up with the conduct of war much preparation has been made, much is going forward, and a great deal more will be possible before armed forces leave their trenches.

Besides, industrial conditions which follow peace will not be so unlike those that accompany war as when the order of events was reversed. Great populations will still have to be fed and clothed while their workmen are returning to their ordinary pursuits; the tasks of international finance will for months, if not years, remain gigantic; problems of transportation by sea may even multiply for a space. The advent of peace can give no such shock to industry, finance, and commerce as the midsummer outbreak of 1914, when all the devices for world-wide, instantaneous communication and the facilities for speedy transport by land and sea combined to create a cataclysmic suddenness in events that exceeded human imagination.

THE MARKETS take news suggesting European peace in all manner of ways. The price of wheat at once goes downward at the prospect of three hundred million bushels pouring out of Russia. By the same token, the price of coffee turns upward on the chance of large shipments into central Europe. As for stocks, they largely follow their particular bents, those which have mounted because of business directly connected with war going downward in sensational declines whereas railroad stocks maintain a course explicable only by a general belief that domestic commerce is to have little abatement in the immediate future. Whatever the course of stocks, however, the plants they represent keep on their ways serenely, or at least with all the serenity possible when

the facilities of production are actually being used beyond their capacity and in excess of the abilities of the railways in transportation.



INTERNATIONAL FINANCE has more than one way of skinning a cat, provided it is not too large. At the time British and French treasury notes which were to be issued in the United States were withdrawn, about a month ago, England arranged a three-year loan of \$50,000,000

THE NATION'S BUSINESS

As Reflected in the Month's News

When Peace Comes

How the Markets Take the News

Foreign Trade Skins This Cat

Why Leather is Scarce—and High

Who is Wise In This Generation?

Steamships for Foreign Trade

at 6 per cent in Japan, the proceeds of which were made available to England in New York. Thus, this financial operation neatly encircled the world, and not only introduced Japan to Europe as a source of foreign loans, but may reduce the amount of gold—recently about \$12,000,000 a year—we send to Japan for her silks and the like.



LEATHER has a place in the daily life of everybody, and it causes no little concern nowadays. One of the harness-makers has done a little figuring. Into a set of harness he says about 66 pounds of leather will go, costing to-day around 70 cents a pound, or a total of \$46.20. He adds trimmings at \$6 and labor at \$6, and so makes \$58 as the cost, without any allowance for overhead expenses or profits.

Excitement in statements about prices is quite as likely to cause misunderstanding as excitement regarding other things. The shoemen say this is the way with some of the expressions about prices of leather. They recall that prices for machine-made shoes once ranged from \$1 to \$9, with the price for the greater part around \$2, and that in later years the price for most shoes has been around \$3, \$4, and \$5. Any suggestion that a three-dollar shoe will cost \$20 within this or future generations they label as preposterous.

The difficulty is that leather has highly important uses for war, and accordingly every belligerent country has not only levied in one way or another upon all the hides and leathers it could reach but has

paid any price needful to draw these articles out of neutral countries. By dint of combing the world, our tanners are actually getting more hides and skins from abroad than before the war began, except in the important item of calfskins. But there has been not only a great domestic revival in the use of leather but European countries have bought unheard of amounts in the United States. In one order this autumn Russia took \$1,500,000 of tanned goat skins, and the competition for sole leather has pushed the price upward of \$1 a pound. Last year we sent abroad three times as much leather and goods made of leather as in the year before the war. Although we shall apparently send less this year, the total value will be near \$150,000,000.



FINANCIAL WISEACRES like political prophets have fallen upon bad times. We used to be told that financiers held the purse strings for both peace and war and that they had constructed such enormous fabrics of peace they would never permit another war of magnitude. But an astounding war came, overwhelming wiseacres and all! We were then assured that before the end of 1915 economic exhaustion would paralyze the arm of every belligerent nation. But the end of 1916 sees armies numbered in the millions at each other's throats more terrifically than ever, belligerents proposing to spend new billions of treasure, and gold flowing from mysterious hoards into the channels of international trade. New wisemen will have to come forward to forecast the future. While we await their appearance we can only reflect that careful mariners sail with circumspection and many a squint at the sun when they are on uncharted seas, and that the skeptic who used to say darkly there is no new thing under the sun had no vision of the events of our generation.



STEAMERS built of steel, intended for foreign trade, and of 2,000 or more gross tons—i. e., real boats—were completed by our yards in November to the number of fourteen. Except for three tankers for petroleum and a vessel built especially to carry coal, all are intended for such cargo as offers. Contracting for new vessels, however, was not quite so lively in November as it had been in earlier months, and for the first time in almost a year the tonnage of steamers under construction or contract showed a decrease instead of a monthly increment. Even so, on December 1 four hundred vessels, aggregating 1,428,000 gross tons, or more than the tonnage of all American vessels engaged in foreign trade to-day, were under construction or contract. Although a good part of these vessels will not be suitable for overseas voyages, and some will

go to foreign owners, the additions to the present American merchant fleet will be large, and the existing fleet is not to be sneezed at either; during the last year American vessels have been in every European port that is not blockaded.

Sales of merchant vessels to aliens some fifteen countries have now prohibited. Our Shipping Act of September 7, 1916, does not go so far, merely requiring in ordinary times that before being sold foreign a vessel under the American flag is to be tendered to the Shipping Board. In the twelve months to the end of last June, 160 American merchant vessels, with a total of 102,000 gross tons, were sold to other flags—the largest transfer of tonnage since the days in the sixties when Confederate cruisers for a while made the flag precarious. Sales in the year before July included vessels of real importance, such as two Pacific liners for passengers and cargo, which went to the Japanese.



DYESTUFFS were in a fair way to be nationalized in Europe, and now they have gone to the point of being internationalized. The scheme for production supported by the French government and the enterprise aided by the British government are going into an interallied company. It seems that the scheme contemplates cooperation in Great Britain, France, and other allied and friendly countries, with a probability that a government-aided enterprise will soon be started in Italy. "National colors" may acquire an entirely new meaning in the years to come, with possible spectroscopic combinations that may add decidedly to the jollity of nations.

Meanwhile, our own color industry is doing pretty well. Two years ago there were about six plants, making a little better than 3,000 tons of synthetic dyes a year, and employing a total of 600 men. Now, we have 30 plants or more, one of them alone employing 1,000 men, and these plants have a capacity of 28,000 tons a year. Moreover, we are now exporting each month dyes valued at half a million dollars, or more than the value of a year's exports before the European War.



BOTTLES have kept mankind company since the days when our progenitors first essayed travel over arid wastes and discovered the amount of comfort held by a little water in a sheepskin. Forthwith they fortified themselves with skins containing a minimum of holes, sewed and daubed the apertures except for a leg through which to fill or draw, and had a convenience with which some parts of the world cannot yet get along.

Egypt got us out of bondage to these skin affairs, which in order to be serviceable had to be subjected to frequent

courses of pressing and wringing and kept well greased. Egypt not only got up handsome bottles of all the precious metals, ivory, alabaster, and pottery, but something like six thousand years ago invented glass and did so well in making it that some of the trade secrets have never been rediscovered.

Bottles in those days, and for many a century after, were objects of art, reserved for royalty and the ultra rich. They were still articles of luxury when the company which sent the first settlers to Jamestown arranged for a bottle factory in the wilderness, apparently setting about as much

THE NATION'S BUSINESS As Reflected in the Month's News

National Colors of Another Color

Any Bottles Today? Yes, Quite a Few

All Hail the Finishing Touch

And the While, White Paper Soars!

Speaking of the Canal Slides—

store upon bottles as upon the gold and silver of the Indies they expected to capture. Only in the early years of the nineteenth century did American ingenuity perfect moulds and other appliances which brought bottles and other glassware into everybody's life as unconsidered trifles.

Even so, a glass blower worked cumbrously, gathering molten glass on his tube, blowing with his mouth until a globe was ready for final shaping, and then expanding it to its finished shape inside a mould. To-day, a workman no longer uses his lungs as a bellows for every individual bottle. He stands by a machine which automatically receives lumps of molten glass into its own moulds, forms the neck, blows the body with compressed air, and delivers red-hot bottles to an oven where they cool so evenly they lose their former habit of cracking upon any and all occasions—creating bottles by the million every year and giving the poorest man in the land an array that not so many centuries ago would have made a king envious. In addition, our factories have had enough bottles left over to double their exports in 1915, and to do better than double them again in 1916. Although our exports of bottles this year will reach a value of \$2,500,000, they will be scarcely two per cent of the value turned out by our bottle factories.



HOT-WATER BOTTLES are commonplace enough but the numbers in which they are arriving in England from the United

States have somewhat upset the equanimity of British manufacturers. The critical eye of British makers looks askance at stoppers which are not of substantial size, and then falls upon our innovation—the ring at the bottom by which the contrivance can be suspended to drain! The British variety has lacked that finishing Yankee touch.

These final touches count. While England was teaching finance to a great part of the world, her artisans were making legions of toy soldiers—everyone of them of solid lead and every one competing with imported German toy soldiers. Finally, one day about fifteen years ago, a workman hit upon the idea of making the soldiers hollow, whereupon made-in-England toy soldiers drove their German antagonists out of the land.



ANNUAL REPORTS of federal officials have been in season. If Congress were not very hardy, it would be daunted by the deluge it meets every time it returns to Washington in December. A government official usually begins to look distraught about the middle of August. A little later, during the throes of actual composition, he becomes inaccessible to his most intimate friends for a week or more. Toward the first of October he undergoes a happy transformation between two days and again carries his dignities with ready amiability. About the same time, however, the huge machine of the Government Printing Office goes to work prodigiously, rousing itself to a fine frenzy the week before Congress meets. As it grinds out copies by the truck load, the newspaper correspondents begin to sweat over the confidential samples they receive. But the Congressmen who have caused the whole succession of travail, by inserting in each bill creating an office a little clause about a report being presented at the opening of each session, go their ways in peace—they bestow the reports on their constituents!



PANAMA CANAL SLIDES have tried the patience of the governor in more ways than one. Between great masses of earth slipping with insidious momentum into the waterway and people who have offered gratuitous advice he has had his troubles. A solemn English report declared the bottom of the canal for nine miles is a huge bog of so hopeless a nature that the American government is contemplating digging another canal,—of course, on the Nicaragua route; the fact is, the nine miles in question were excavated in rock. One American geologist said that, so far as material to be excavated is concerned, Culebra Cut would have to be done over again. Other people have suggested that the slides be given an asphalt roof to keep out the rain or reduced to subjection

in wire netting, that rather considerable hills be dried out with steam, and so forth.

About the origin of slides there has been the same interesting diversity of expression. One man suggests a huge reservoir of water within the earth which by its pressure starts things moving. Another has imagined subterranean gas trying to escape. A third has declared that the masses of material on opposite sides of the canal have an irresistible attraction for each other. And a fourth undertakes to prove that the canal severed a huge natural magnet within the earth and set up magnetic disturbances which have played smash.

With some show of heat the governor protests that no waters have gushed forth, that there has been not a sign of bubbling gases, and that the hills about the canal have not defied the force of gravity; about the magnet he maintains a significant silence. Altogether, he has probably needed all the will-power of a veteran army engineer to keep his dredges persistently gnawing away at the foot of the treacherous material as it intrudes into his canal, in a great confidence that sometimes the mass will come to a permanent rest.



SUGAR, says Mr. Binkley, in the earlier pages of this number, is consumed in the United States at a rate of nine billion pounds a year, or ninety pounds for each of us, making our sugar bill for this year not far from \$700,000,000. Yet, we are not comparable with some sugar eaters. A bowl of sugar cubes can safely ornament the counter of almost any American lunchroom, but in Constantinople it would be plundered before the proprietor could set his fez straight. How much sugar a Turk could eat in a year if he had a real chance, no one would venture to predict.

Of the total price paid this year by American sugar-buyers, the retail grocer will get a bit, the wholesaler will get another bit, and then the course of the profits diverge, accordingly as it happens to have been beet or cane, for pretty nearly one-fourth of the sugar we have this year will come from American beets and the companies that grind them will have somewhere in the neighborhood of \$100,000,000 for their labors, passing on some \$40,000,000 to the farmers who plant, thin, weed, and dig, and contributing a pretty penny to the railways for freight. Of course, the beet companies have their operating expenses and capital charges to pay out of the balance, but even so, they have enough profit left these days to put the shares of one of them at 250 per cent of the high price for 1915.

The money for raising another fourth of our sugar will stay in the United States and its possessions—perhaps \$25,000,000 going to Louisiana, around \$7,000,000 to

the Philippines, something like \$50,000,000 to Porto Rico, and perhaps \$60,000,000-odd to Hawaii, the greatest grower of cane under the American flag. The second half of our sugar we shall get very largely from Cuba, where present prices have brought high prosperity and allowed some sugar companies to show earnings this year which are 100 per cent of their capital. Cuba will get pretty nearly \$200,000,000 for the sugar it will send to the United States out of the crop it began to grind in December.

But we import these days a deal of

THE NATION'S BUSINESS
As Reflected in the Month's News

Where Your Sugar Money Goes

What the Canal Figures Show

Our Income 40 Billion, Thank You!

sugar which we put through the manufacturing process of refining and re-export. In the year before the European War we exported less than 100,000,000 pounds. It is another story now. In the twelve months just closed we have shipped close to two billion pounds. We send it to Europe by cargoes. One refining company sold \$5,000,000 worth in October to European governments which have assumed governmental control of their subjects' appetites. Even so, Petrograd has sugarless days in some weeks and is looking for supplies in China; Switzerland, apparently finding insufficient the cargoes she has for the first time purchased here, seems to have arrangements for Java sugar to proceed through Rotterdam up the valley of the Rhine to her borders, and English housewives have been paying 16 cents a pound—a figure which compares with 40 cents or more paid according to Scotch accounts 600 years ago when Venice commanded the trade in sugar as well as in spices and other rare products of the romantic and mysterious East. In those times sugar was a luxury and a medicine. Altogether, for a member of the grass family, sugar cane has caused a lot of furore in its day, and its course in history, diplomacy, and tariff legislation may not yet have come to an end, by any means.



THE PANAMA CANAL has given us an opportunity to gather statistics of trade at a new crossroad. Of the traffic using the canal in September, for example, nitrates from Chile made up one-third of the whole. Twenty-five cargoes were bound for the ports of the United States, from Jacksonville to Boston, by far the greater part heading in at the Virginia

caples. Eight cargoes went to England and France and one was bound for Holland. The United Kingdom used to take one-third Chile's nitrates, Germany a fifth, and the United States somewhat less than a fifth.

Sugar followed nitrates in quantity, although at a respectable distance, amounting to 50,000 tons, or one-sixth as much as nitrates. This sugar was coming from Peru, Hawaii, and the Philippines, and eighty per cent was on its way to the United States,—21,000 tons from Hawaii, 8,000 tons from Peru, and 5,500 tons from the Philippines.

At this point in the descending order of quantities our outward-bound traffic appears, in coal. Forty thousand tons was the amount, and all came from the Virginia caples. It went mostly to the west coast of South America but one cargo proceeded across the Pacific to Manila.

Petroleum and its products are well-nigh omnipresent these days and followed coal. Crude oil aggregated 22,000 tons, and went both ways. While Tampico was shipping 8,000 tons westward to Talara this latter port was sending 6,000 tons to New Jersey.

Of the 154 ocean-going vessels that used the canal in September, 77 were British, 37 were American, and 10 were Norwegian.

As for the condition of the canal, the statement of a British firm to another British house is that construction is wholly completed except for a half mile in Gailard cut, that prevention of slides is merely a question of time and money, and that the canal is easy to navigate.



THE INCOME of the American people is rising to rather startling levels, but precisely how startling no one can say. It is no easy matter to get at the "budgets" of twenty-five or thirty million families who get their income in every conceivable fashion, from the most esoteric manner of clipping coupons to picking rags for a living. About the total only surmises,—half guesses and half estimates,—are possible. One well-grounded estimate put the income of the American people in 1910 at thirty billion dollars. One of the clews how things have progressed since is the tax levied on the net income of corporations. It has grown at such a rate that, if all "natural" families had done as well, the income of the country this year would be around eighty-four billion. But, of course, such a result merely illustrates what wonderful things can be done with paper and pencil. It is based upon too many inaccuracies to be true. In six years corporations have increased at a rate never matched by the human race. Undoubtedly a greater part of the tax on corporations went uncollected in 1910 than in 1916. It is more than likely that the incomes of ordinary folk,—even the incomes of the fortunate one and a third

per cent of the population who pay the federal income tax,—did not mount so rapidly as the earnings of corporations. These doubts can be multiplied pretty nearly ad infinitum, and every one of them cuts down that eighty-four billion, some of them by a billion or so apiece. Perhaps the real figure is around forty billion.

We get back on somewhat solid ground only when we discover hard figures demonstrating that individuals and corporations paid a federal tax upon close to eight billion dollars of net income in 1915,—an increase of three billion in one year, so far as one may rely upon such faulty data as other peoples' tax returns. Even this figure of eight billion has to be corrected and increased for the incomes of individuals whose incomes fell below the minimum hit by the federal tax.

If we cannot get at our income, but still have an appetite for statistics in the billions, we can look up our wealth in the estimates of the Census Bureau. After searching county records and all manner of other places where wealth gets set down in its parts, the Census in 1912 valued our lands, buildings, chickens, cattle, machinery, railways, and all other earthly possessions at one hundred eighty-seven billion dollars. No one needs much courage to conclude that to-day this figure, whatever it means, has passed the two hundred billion mark. In 1850, it was a matter of seven billion.



THE FEDERAL RESERVE SYSTEM continues its development. When Christmas came the twelve Reserve Banks had assets of \$750,000,000 and held \$450,000,000 in gold in their hands. Additional gold to the amount of \$278,000,000 had been set aside to retire outstanding circulation. The total gold thus held within the agencies created three years ago, \$728,000,000, compares with the gold held in the aggregate by the principal banks of England, \$700,000,000. It compares even more directly with the entire net imports of gold into the United States in the last two years—rather more than \$900,000,000.

The gold as it actually comes in, however, does not forthwith claim asylum in the Reserve Banks. Some of it goes into the United States Treasury, where there are now stored away altogether \$2,122,000,000—a hoard particularly susceptible to attack, since the greater part can be carried away by any one who can present "yellow backs," as we call the receipts issued by our national arrangement for warehousing gold.

Other portions of the imports have gone into the vaults of member banks—where there is something like \$125,000,000 in actual gold, besides more than twice as much in gold certificates. State banks and trust companies probably have

\$100,000,000 in actual gold. And on December 1 there were more than \$400,000,000 further in the "hands of the people." Thus, the amount of coin and bullion actually in the country, regardless of the obligations outstanding against it, stood on December 22 close to \$3,600,000,000. If we were to give up all the gold we have tucked away in tills, old stockings, and other private depositories, melt all of our gold jewelry, plate, and pocket pieces, and mobilize the whole of our gold we should have about \$4,000,000,000, or one-third of all the gold mined throughout the world since Columbus blundered onto the continent.

THE NATION'S BUSINESS *As Reflected in the Month's News*

Our Bank Book at Christmas

Figures Are Out of Joint

One of the great purposes of the Reserve System is to control the gold which is in the country and prevent it from being drawn away at the will of other countries. In many ways the Reserve Board has been working toward this purpose and on December 25 it announced an important step, saying that the Reserve Bank of New York will appoint the Bank of England its agent and correspondent in London. A natural query is how far this arrangement has been made to achieve much the same results as the issue of such treasury bills in the United States as were the subject of a public warning from the Reserve Board in November. Other perfectly logical questions are how soon central banks in other European countries will be made agents, and how far the Bank of England will reciprocate the present step by making Reserve Banks its agents in the United States.

That the New York bank will proceed to build up deposits of gold with the Bank of England is almost mathematically certain, since gold deposits abroad provide the chief means by which a country's banking authorities can deal with international exchange, and the rate of exchange is the thing that drains away a people's gold or heaps it up. This is the device being used by other countries. The gold held abroad by the Bank of France, and undoubtedly used as a basis for most international transactions in support of war, has in the past six months grown from \$15,000,000 to \$318,000,000. All the twelve Reserve Banks together would probably not care to make so large deposits abroad of their present gold, but their deposits can be ample to provide the safeguards of exchange which

will protect our banking and currency systems against any onslaughts that may follow peace in Europe. The sum total of the results in the immediate future will be to place control upon importations of gold by affording a means for investing American credits at London.

Transactions in the domestic market are gradually mounting upward to a point where the resources of the Reserve System will count in the event of need. In a year the Reserve Banks have developed their purchases of acceptances threefold, on December 22 holding bills of exchange aggregating \$156,000,000, of which they had purchased \$124,000,000 in the open market much like any other investor in short-time paper.



STATISTICS will have to be recast in order that they may have a meaning in the future. For the moment they are out of joint. Our figures show \$350,000,000 in gold flowing southward over the Saint Lawrence river since last January, and at least three-quarters of it remaining in the country for the present. Every one knows that all this metal is not produced in Canada, and every one hears vaguely of it coming across the Pacific to British Columbia and perhaps of warships bringing kegs of it across the Atlantic to Canadian ports. But the real statistics—the facts of origin, whether new gold from mines or a vast aggregation of meager savings of thrifty peasants, the facts of transportation, and the facts of financial transactions—while perhaps appropriately enough hidden for reasons of war, will be sought by men whose daily transactions may turn upon just such facts.

Statistics of gold merely illustrate the point. The figures for many other articles will need reorganization. Statistics are peculiarly democratic and their accuracy plays no small part in forestalling possibilities of monopoly. President Garfield ascribed to them even a higher function, saying:

"The developments of statistics are causing history to be rewritten. Till recently, the historian studied nations in the aggregate, and gave us only the story of princes, dynasties, sieges, and battles. Of the people themselves—the great social body, with life, growth, forces, elements, and laws of its own—he told us nothing. Now, statistical inquiry leads him into hovels, homes, workshops, mines, fields, prisons, hospitals, and all other places where human nature displays its weakness and its strength. In these explorations he discovers the seeds of national growth and decay, and thus becomes the prophet of his generation."

Pending Congressional Legislation

The Stint Awaiting Congress is to Pass Fourteen Appropriation Bills in Fifty-Three Days, a Bill Every Four Days.

CONGRESS reconvenes on January 2, after ten days of recess. In the fifty-three business days that remain it will have to enact fourteen regular appropriation bills.

In the three weeks which preceded the Christmas holidays, the House passed three of the bills, carrying about \$75,000,000, thus leaving about a billion and a half dollars to be mulled over in the next nine weeks, even in the House which has made more progress than the Senate.

The income side of the government's ledger, as well as expenditures, may require immediate attention, if an extra session is to be avoided in the spring. When the Secretary of the Treasury published his annual report, on December 6, he urged upon Congress a necessity for passing new legislation to provide additional revenues, pointing out that at the end of the year for which Congress is now making appropriations—i. e., on July 1, 1918—there will be an actual deficit of \$185,500,000 in the federal treasury. On December 31 the Secretary said this deficit would be \$279,000,000 and that an adequate working balance for the treasury would necessitate \$380,000,000 new revenue in the next 18 months.

As accounts are now stated, the net balance in the treasury on December 29 was \$114,600,000. If amounts placed to the credit of disbursing officers, but not yet drawn upon by them—i. e., in effect assigned for definite expenditure—are deducted, the balance was \$34,000,000.

As long ago as last July the House Committee on Ways and Means said that \$125,000,000 in bonds would be issued before next summer. Later the Senate Finance Committee said the issue would have to be \$130,000,000—the cost of placing and keeping troops on the Mexican border, and \$86,000,000 more if they remained on the border beyond January 1, 1917. On January 1 they were still on the border. The conclusion is that if the proceeds of bonds are to be used to pay these expenses, the whole issue will be around \$200,000,000, although only small amounts may be put out at a time. The total may be expanded to \$250,000,000 and more if bonds authorized for other purposes, such as use by the Shipping Board to obtain merchant vessels, are sold, and presumably \$25,000,000 to pay for the Danish West Indies will come from bonds, raising the total possible issue well to-

ward \$300,000,000. When \$4,000,000 of four per cent Philippine bonds were marketed in October, the competition among bidders and the price received, 100.76, were taken as good auguries for subsequent sales of United States bonds. If farm-loan bonds are on the market, however, when United States bonds are offered their competition may be interesting.

Additional taxes which might be used to increase the revenues after next July are being studied by the House Committee on Ways and Means. Reduction of the exemption from income tax, perhaps to as little as \$1,000, increases in the tax on decedents' estates, larger taxes on whiskey, beer, and cigarettes, new taxes on sugar, coffee, and the like, and even taxes on phonograph records, are some of the proposals made in a tentative way. Although a new omnibus revenue bill became law in September, another one is possible before March, with provision to add around \$200,000,000 a year to the federal revenues.

Meanwhile, the Senate, believing an emergency has arisen, on December 20 passed a bill which until July 1 would permit power companies on the American side at Niagara Falls to utilize any idle generating machinery they may now have on condition that the added water diverted does not in the aggregate exceed 4,400 cubic feet per second. This would allow a total diversion of 20,000 cubic feet, the maximum permitted under a treaty according to which 36,000 feet may be taken on the Canadian side.

On the Canadian side some 30,000 feet are now being utilized, and considerable power has been transmitted to industries in the United States. The emergency is said to arise through the act of the Canadian government in placing a limitation upon the power generated within its jurisdiction and transmitted to the United States.

In the House the bill has been delayed, after being amended so as to be effective only to March 4. Although debated on the twenty-first and twenty-second, it went over to January 4. The House Committee on Foreign Relations plans to report a bill early in 1917 for comprehensive regulation of power at Niagara.

Since July conferees between the Senate and House have been striving without success for some middle ground, acceptable to both ends of the Capitol, for regulation of water-powers.

With things in this situation, the Secre-

tary of the Interior announced on December 21 that he had submitted a new plan to the President. He suggests a Water-Power Commission, to be composed of the Secretaries of War, Interior, and Agriculture, and to have power to grant leases for the use of public lands or navigable streams to develop water-power, making the leases upon the terms and conditions the Power Commission might determine. Such leases he believes could be issued under general regulations and might be limited to a maximum term of fifty years. These principles may be adopted if legislation is enacted at this session.

The advantages the Secretary claims for his plan are that it would fix responsibility for the conditions, such as rentals, upon the administration in power, that it would relieve Congress from controversy over details, and that by regulation appropriate distinctions could be made among different classes of water-powers.

The first business of the House when it meets on January 2 will be the bill for federal aid to vocational education. If this bill does not pass the House by the end of the day, it probably will pass soon afterward, as it has a privileged status through an arrangement made on December 6. Conferees from House and Senate will then decide upon the final form of the provisions for federal administration of the federal part of the plan.

For several years the bill making appropriations for the postal service has annually carried riders of importance which caused controversy. Last year they dealt with railway mail pay.

This year, according to plans made in committee in December, riders will fix postage rates for periodicals according to the zones of the parcel post, and perhaps enlarge the third class to include catalogues at higher rates than they now pay. The exact intentions of the committee, although determined before the holidays, are being kept secret until the week of January 2. But there are indications that the Committee on Rules, probably influenced both by protests and by the attitude of the Post Office Department, which for the time being at least is adverse, may fail to provide the special procedure essential for the success of the riders in the House.

In accordance with recommendations of the Federal Reserve Board and the Federal Advisory Council, attempts will undoubtedly be made to advance the dates when member banks in the Reserve System will make the final adjustments of their reserves, and incidentally increase the amount of gold impounded in the Reserve Banks.

Important hearings will occur in January. The Senate Committee on Interstate Commerce will begin on January 2 to listen to arguments about compulsory investigation of disputes between railways and their employees as a condition precedent to strikes or lockouts, and on January 5 will conduct hearings on the Webb bill, permitting co-operation in export trade. The corresponding House committee—on Interstate and Foreign Commerce—will conduct hearings on January 5 and 6 about federal legislation dealing with resale prices on indentified merchandise. Regarding universal military training for all men for six

months after they reach 18 years of age, the Senate Committee on Military Affairs will hear further testimony in January. The committee of Congress and departmental officials which has been trying to arrange some ground of adjustment between private claims and naval requirements in Naval Reserve Number Two, in California, has apparently adjourned without accomplishing its purpose, thus possibly leaving another important subject for decision in debate at this session. As the end of the session approaches, and haste for legislation becomes more urgent, hearings before the House Committee on Rules may grow in frequency.

Comes Now the Tax Gatherer

If You Enjoy an Income or Are a Corporation, New Year's Day 1917, Has Real Significance for You.

THE law of 1913 for a federal income tax has been revised, simplified in view of two years of experience on the part of officials, and been in force for three months. As the time for making returns under the new law has come, and some of its administrative features have their first effect on January 1, the main provisions are here summarized. In the same connection an outline of the new federal law taxing capital stock and effective on January 1 is added.

INDIVIDUAL INCOME TAX

Persons Subject

All persons who become entitled to income which the United States can reach are affected—citizens or aliens resident in the country, citizens resident abroad, and non-resident aliens with income received from a source in the United States. Partners pay tax as individuals upon their share of partnership profits. Estates pay tax on the income received.

Income Involved

Account is taken of all income for each calendar year, beginning with the twelve months of 1916. The law specifies:

1. Compensation for personal services, including those that are professional;
2. Gains from business, trade, or commerce;
3. Profits from sales or dealings in real or personal property;
4. Shares in partnership profits;
5. Income (but not value) of property acquired by gift, devise, or inheritance;
6. Rents;
7. Dividends;
8. Interest;
9. Income from any other source whatever.

Exemptions

Certain income is disregarded for purposes of the tax, as follows:

1. Life insurance—the proceeds paid to beneficiaries, the amount of premiums returned to the insured person, the amount received upon surrender of policy, the amount received at maturity of an endowment policy, etc.;
2. Gifts—the value of property acquired through gift, devise, inheritance, etc.;

3. Interest—upon obligations of states, counties, cities, etc., upon obligations of the United States or any of its possessions or upon federal farm-loan bonds;

4. Compensation—of the President and federal judges now in office, and of state, county, or other municipal officers and employees except so far as they are paid by the federal government.

Deductions

From gross income deductions may be made to ascertain the taxable income, as follows:

1. Necessary expenses actually paid in conducting business or trade (but not including personal, living, or family expenses, and not to include expenditures made to increase value);
2. Interest paid on indebtedness;
3. Taxes paid at home or abroad (but not including assessments for local benefits);
4. Losses sustained in business or trade or from theft, fire, storm, or other casualty, if not compensated by insurance or other provision;
5. Losses in transactions undertaken for profit but outside the individual's regular business (not to exceed the profits from similar transactions);
6. Debts ascertained to be worthless and actually charged off;
7. Depreciation to a reasonable amount in property used in business or trade (in case of oil and gas wells, to be ascertained by the regular flow; in case of mines, not to exceed value at mine of the year's products—these deductions over a series of years not to exceed capital originally invested); deductions for depreciation are to follow regulations of the Secretary of the Treasury.

Basis of Value

When property was held on March 1, 1913, loss or gain from sale, or the depreciation allowed, is determined according to the fair market price or value on that date.

Rate of Tax

When an unmarried person has net income ascertained as indicated above to exceed \$3,000, or a married person has such net income in excess of \$4,000, he pays a tax of 2 per cent upon the excess. This is the normal tax. Before computing the exact amount of his payment, however, he may deduct from his net income two further items, (a) dividends he received from corporations and (b) the amount of income on which tax has been withheld at the source, in the manner explained below.

The additional tax is due upon the net income in excess of \$20,000, without any of the deductions or allowances mentioned in the paragraph immediately above. The additional tax is:

1 per cent upon	\$20,000 to	\$40,000
2 per cent upon	40,000 to	60,000
3 per cent upon	60,000 to	80,000
4 per cent upon	80,000 to	100,000
5 per cent upon	100,000 to	150,000
6 per cent upon	150,000 to	200,000
7 per cent upon	200,000 to	250,000
8 per cent upon	250,000 to	300,000
9 per cent upon	300,000 to	500,000
10 per cent upon	500,000 to	1,000,000
11 per cent upon	1,000,000 to	1,500,000
12 per cent upon	1,500,000 to	2,000,000
13 per cent upon	2,000,000 upwards	

Collection at Source

Collection at the source is used only for the normal tax. This tax—i. e., 2 per cent after January 1, 1917—is to be withheld and paid over by the person, association, or corporation (except in case of dividends) that has to make to any person periodic payments on which that person would be taxable and which in the aggregate exceed \$3,000 yearly. From interest on bonds and mortgages the normal tax is to be withheld although the amount is not \$3,000. The tax is not withheld upon bank deposits. Failure to withhold at the source causes personal liability for the amount in question.

Withholding at the source is required of employers, mortgagors, lessees, trustees, administrators, officers of the United States.

The person against whom the tax is to be withheld can have allowance for his personal exemption (of \$3,000 or \$4,000) by presenting to his employer, etc., at least 30 days before March 1 his certificate of the facts; thereupon the tax is not to be withheld on these amounts. Otherwise, the employee, etc., can only file a claim with the Treasury Department for a refund of a portion of the tax paid on his behalf.

Allowances for deductions, such as interest on indebtedness, etc., an employee can obtain in two ways—either by filing with his employer, etc., 30 days before March 1 a statement of his income from all sources and the deductions of all kinds he seeks or by filing with the collector of internal revenue of the district an application for deductions.

Statements of Incomes

Returns have to be made before March 1 by taxable persons and by persons who withhold the normal tax of taxable persons. On his own behalf every person having a net income from all sources of \$3,000 or over must make a return, even though no tax remains to be paid. A husband and wife living together may make a joint return, and receive a joint personal exemption of \$4,000 from their aggregate income. Guardians, trustees, and all other persons acting in a fiduciary capacity make returns of the income on the estates they hold.

Persons withholding normal tax at the source make return for the part of the income on which they withhold, attaching all certificates of exemptions and deductions filed with them.

Date of Assessment

All persons are to be notified on or before June 1 of the amount of tax for which they are liable.

Date of Payment

The amounts of tax assessed are to be paid on or before June 15. The penalties for nonpayment—an addition of 5 per cent of the tax and interest on the tax at rate of 1 per cent a month—accrue 10 days after demand subsequent to June 15.

CORPORATION INCOME TAX

Those Subject

Corporations, joint-stock companies, associations, and insurance companies organized in the United States, and corporations, etc., organized in other countries so far as they derive income from sources in the United States, are subject to a tax of 2 per cent of their total net income in the calendar year of 1916 and subsequent years, with adjustments if they use fiscal years.

Certain classes of organizations are, however, exempt from the tax but not from provisions which require them to withhold the normal tax on salaries of their employees, etc. They are:

1. Labor, agriculture, and horticulture organizations;
2. Mutual savings banks without share capital;
3. Fraternal beneficiary societies operating under the lodge system;
4. Domestic building and loan associations and cooperative banks without capital stock and operated for mutual benefit and without profit;
5. Cemetery companies owned exclusively for benefit of members;
6. Corporations and associations exclusively for religious, charitable, scientific, or educational purposes;
7. Business leagues, chambers of commerce, and boards of trade, not organized for profit;
8. Civic leagues or other organizations exclusively for social welfare and not for profit;
9. Clubs exclusively for pleasure, recreation, etc., with no net income accruing to private stockholders or individuals;
10. Mutual companies insuring against hail, cyclone, or fire, mutual ditch, irrigation, or telephone companies and like local organizations collecting assessments from members for sole purpose of meeting expenses;
11. Cooperative companies for marketing farm produce and returning to members on basis of quantities sold the proceeds less expenses;
12. Corporations organized exclusively to hold property and turn over net proceeds to an organization which itself is exempt;
13. Federal land banks and national farm-loan associations;
14. Joint-stock banks as to income received from bonds issued under the federal farm-loan system.

Other Exemptions

Income accruing to the Philippines, Porto Rico, a state, county, city, etc., from public utilities or governmental functions is exempt, and no tax is to be laid on a corporation with which a state, etc., has a contract regarding a public utility to the extent in which the tax would burden the state, etc.

In mutual insurance companies the portion of premium deposits returned to members is exempt.

Deductions

From gross income deductions are allowed, as follows:

1. Ordinary and necessary expenses of maintenance and operation, including rentals but not including expenses for betterments;
2. Uncompensated losses sustained and charged off; if property was held on March 1, 1913, value at that date is taken as a basis for computation;
3. Reasonable depreciation of property employed—in the case of oil and gas well or mines, as outlined above under the individual tax; in the case of insurance companies, any net additions to reserves required by law and sums other than dividends paid on policy and annuity contracts;

Announcement

A SUPPLEMENT to the February NATION'S BUSINESS will contain a complete account of the Annual Meeting of the Chamber of Commerce of the United States, the addresses, the discussions, committee reports, resolutions offered and adopted. It will not only give an epitome of the convention's constructive thought, but will also attempt to reproduce, by pencil and camera, the atmosphere of the meeting.

Many who called for this supplement last year were disappointed, because the edition, increased as it was by 5,000, was soon exhausted.

A post-card will prevent your being disappointed this year.

It will be ready for delivery February 8, and the price is at cost—35 cents.

ORDER NOW!

4. Interest paid on indebtedness, this indebtedness not to exceed the paid-in capital stock by more than one-half except in the case of corporations which borrow on property in which they deal; such corporations may deduct all interest regardless of the amount of their indebtedness;

5. Taxes paid at home or abroad, except for local benefits;

6. Interest paid by banks on deposits.

Tax-Free Covenants

A corporation which has issued bonds with a guarantee that interest will be free from tax may not deduct payments of tax they have made under this guarantee.

Tax Year

The tax year is the calendar year, but upon notice 30 days before March 1 it may be changed by any particular corporation to its fiscal year.

Returns, Assessments, Etc.

Every corporation must make a return, filing it before March 1, or within 60 days of the end of its fiscal year. The duties for assessment, etc., follow those indicated for the individual tax.

CAPITAL-STOCK TAX

The Tax

This tax is an excise upon the power to do business as a corporation. The tax is 50 cents per \$1,000 of the fair value of the capital stock and is paid by the corporation. As explained below, the tax levied in January, 1917, will be 25 cents a \$1,000.

Corporations Subject

Corporations, joint-stock companies, associations, and insurance companies organized in the United States, and corporations, etc., organized elsewhere so far as they engage in business in the United States, are subject to the tax if

1. Conducted for profit, with their
2. Capital stock represented by shares, and
3. Engaged in business (so far as the levy in January, 1917, is concerned) at any time between July 1, 1915, and June 30, 1916.

Fair Value of Shares

The fair average value of the stock for the preceding year in question (July, 1915-June, 1916, for the January, 1917, returns) is the basis. If a stock is listed on an exchange the fair value is ascertained according to the average of the highest bid price on the last day of each month of the year in question; if the stock is not listed, but sales have accrued and prices are known, by the average; if not listed and if no known sales occurred, by an estimate which takes into account surplus and undivided profits, the kind of business, earning capacity, and dividends or profits over five years. In the case of foreign corporations doing business in the United States the basis is the average capital invested in the United States during the preceding year. Stock that has been issued but subsequently acquired by the company and held in the treasury is to be included.

Deductions

From the fair average value there are to be deducted

1. \$99,000 (in the case of foreign corporations, proportioned to the ratio of the whole capital to the part employed in the United States),

2. In the case of insurance companies, deposits and reserve funds required by law or contract.

A corporation organized in the United States may not make deductions for capital invested abroad.

Munitions Companies

From the tax computed to be due, concerns which are also subject to the munitions tax provided by the law of September 8, 1916, may deduct the amount of the latter tax, but as the munitions tax will not be determined until spring this deduction may not be made in January, 1917, but will be allowed in July, 1917.

Exempt Corporations

All corporations and associations exempted from the income tax on corporations, as indicated above, are likewise exempted from paying the tax on capital stock. Furthermore, mutual and other corporations which do not have share capital are exempt, including "Massachusetts trusts."

Returns

Returns are to be made in January, 1917, being due on January 1. They are to be based upon the last complete fiscal year of the government—July, 1915-June, 1916. All corporations organized in the United States which are not exempt and which are represented by shares with a market value of \$75,000 and all foreign corporations engaged in business here, regardless of their capital or investments, must make returns. Returns will again be due on July 1, 1917 (for the year of July, 1916-June, 1917) and annually thereafter.

Tax Payable

In January, 1917, the tax for half a year—January to June, 1917—will be payable, accordingly being half the regular amount of 50 cents a thousand dollars. In July, 1917, the tax for the succeeding twelve months will be due. Payment may be made as "advance collection" when the return is filed, but it is not required until notice of the assessment is received from the collector of internal revenue.

In the outline printed above interpretations of the law issued by the Treasury Department have been taken into consideration. Many of the departmental and court decisions under the Corporation-Tax law of 1909 will apply—for example, as to what constitutes "engaging in business."

RETURNS received at the office of the National Chamber, as well as reports from Washington hotels, show that the Fifth Annual Meeting of the Chamber of Commerce of the United States, which takes place at the Hotel New Willard on Wednesday, Thursday and Friday, January 31 and February 1 and 2, 1917, will be more largely attended than any of its predecessors. Delegations are coming from the Pacific Coast on special trains. Many member organizations have indicated that they will send their full quota of alternates in addition to their voting Councillors and delegates.

Publication of the program is always delayed to a late date because the object of the committee in charge is to select subjects of the most immediate moment to the business men of the country and to have them presented by those best qualified to speak. The commercial, foreign relations and political situations change with such kaleidoscopic rapidity in these critical times for American business that it is not possible to tell far in advance which subjects can best be treated and acted upon.

BIG subjects are to come before each meeting. The Wednesday evening session will be devoted to the Railroad Situation with prominent speakers representing the different sides and with the report of the Chamber's Committee on Railroads by its Chairman, Mr. C. F. Weed, President of the Boston Chamber of Commerce. Thursday morning, National Defense, to which the Chamber is committed, and is seeking from Congress legislation to carry out the program endorsed in its Referendum No. 15, is to be discussed. Among the speakers will be the Secretary of War and Major General Leonard A. Wood. The report of the Chamber's Committee on National Defense will be submitted by Bascom Little, of Cleveland, Chairman.

Another entire session will be devoted to the critical subject of industrial relations and still another to the subject of preparation for conditions after the war, divided into four aspects: business conditions, financial conditions, transportation, and education for foreign trade. The Secretary of Commerce will speak on Trade Preparations after the War; Wallace D. Simmons, President of the Simmons Hardware Co., on Education for Foreign Trade, and other well known experts will discuss subjects in this important section.

Much more time than in the earlier years of the Chamber's existence will be reserved for the actual business which the delegates of the organization members in annual meeting have to transact. There are at least ten reports from committees which will call for action should the annual meeting see fit to dispose of them rather than refer them to subsequent referendum. Two sessions of the meeting have been reserved entirely for such reports, while other important matters will be submitted in connection with the discussion of the subjects above mentioned.

TO provide for greater opportunities to study particular subjects presented by committees a new departure is proposed for this year. Group meetings or special luncheons will be arranged at which the

chairman of a particular committee will preside and present briefly the report for discussion. Among such subjects and reports which have been tentatively selected for special discussion are:

DAYLIGHT SAVING, presented by a special committee of which Robert Garland, President of the Pittsburgh Chamber of Commerce, is Chairman.

FOREIGN RELATIONS, by the Honorable Charles H. Sherrill, former Minister to Argentina, Chairman.

IMMIGRATION, by Frank Trumbull, Chairman of the Board, Missouri, Kansas and Texas Railroad, Chairman.

ORGANIZATION OF STATE CHAMBERS OF COMMERCE, by Homer L. Ferguson, President of the Newport News Shipbuilding and Dry Dock Company, Chairman.

Other committees to report are those on VOCATIONAL EDUCATION, Howell Cheney of Cheney Bros., South Manchester, Conn., Chairman; DEPARTMENT OF COMMERCE, A. W. Shaw, Editor of *System*, Chicago, Chairman; STATISTICS AND STANDARDS, A. W. Douglas, Vice President Simmons Hardware Company, St. Louis, Mo., Chairman; UNIFORM BILLS OF LADING, Charles S. Haight, New York, N. Y., Chairman.

IT is probable that two new boards recently authorized by legislation will be appointed and organized prior to the Annual Meeting. The membership of the Shipping Board has already been announced while that of the Tariff Commission is expected. In case of the organization of these two commissions the Committee on Program purposes to invite the chairmen or a member to outline the work of these two commissions which have such an important bearing on commercial and industrial progress.

THE opening session, Wednesday, January 31, at 11 A. M., will be devoted to the organization of the meeting. At this time will come the address of the President, R. Goodwyn Rhett of Charleston, S. C., which has come to be a most important feature of each annual gathering as the President reviews the activities of the Chamber throughout the year. Again, the session on Friday morning, February 2, will be practically a business session, devoted to the election of officers, report and action on the amendment to the by-laws and report of the Committee on Resolutions.

THE banquet will be held on Friday, in the ballroom of the New Willard Hotel. Although it is the largest dining hall available in Washington, last year its accommodations, limited to 800, could not meet the demands of those in attendance at the meeting. As a fifty per cent larger attendance is expected this year there should be no delay in filing application for places in accordance with notice sent out from headquarters.